

Friday, February 3rd 2017

KEYNOTE SPEAKER 8:30-10:00 AM

Dr. Konstantin Batygin, Ph.D.

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CA*

WORKSHOP INFORMATION

To support your conference experience, workshop sessions have been categorized by topic area (Science, Technology, Engineering and Mathematics). Additionally, the target audience has also been specified for each workshop. Conference attendees may follow one topic area for an in-depth, content-rich focus on a particular subject matter, or may pick and choose among topics to sample the full complement of conference offerings. The following are the listing of session tracks and their abbreviations.

CONTENT	TARGET AUDIENCE	
S – Science	I – Infants	K – Kindergarten
T – Technology	T – Toddlers	F – First Grade
E – Engineering	P – Preschool	S – Second Grade
M – Mathematics	TK – Transitional Kindergarten	

SESSION I: 10:30-12:00 PM

“Enchanted Engineering”

Presenters: Jennifer Montgomery, MA, and Valerie Marquez MA

*El Camino College
Redondo Beach Unified School District*

Room: **Pacific A**

Content: **E**

Target Audience: **P, TK, K**

Engineering is the focus of this workshop based on fairy tales and children’s books. We will explore unconditional building materials and expansion of the block area. Can you build a bridge for the Billy Goats Gruff? A pulley for Rapunzel?

“T” is for Toddlers”

Presenter: L. Chérie Hogan, BA, MA

CSUN Children’s Center

Room: **Pacific B**

Content: **T**

Target Audience: **T**

Let’s take a trip to Toddler Town!

Using the “T” in STEM for Technology and Tools with the Teachings of cooking with Toddlers as young as 18 months old! Plus Tried & True recipe handouts given to all attendants.

“Incorporating Culture and Caregivers into STEM”

Presenters: June “Pua” Aquino, BA, and Dayna Begonia, CDA

*Partners in Development Foundation
Ka Pa’alanaRemo Inc.*

Room: **Pacific C**
Content: **STEM**
Target Audience: **I T P TK**

See how a NAEYC accredited preschool that serves an at-risk population incorporates culture and family engagement into their STEM curriculum. Leave with a take home activity and a free book!

“Do You Know It When You See It? Can You Copy, Extend and Create a New One? The Developmental Continuum of Patterning!”

Presenter: Susan Walsh, Ed.D
University of Laverne

Room: **Monterey**
Content: **M**
Target Audience: **P TK**

Participants will learn the progression of preschoolers' and TK children's understanding of pattern concepts. This workshop is interactive and designed for participants to be aware of developmentally appropriate strategies to support patterning at each developmental level, based on California Preschool Learning Foundations and NCTM Standards.

“Curious About Mars”

Presenter: Carrie Lynne Draper, MEd
Readiness Learning Associates

Room: **Pasadena I**
Content: **STEM**
Target Audience: **P TK K F S**

This inquiry based planetary science workshop begins your mission to train your students to become our next generation of explorers! How do we explore space? You will engineer, use models, learn about orbiters and make a lander. Compare Mars and a mystery planet, study lava layers & so much more! Be ready to launch space learning in your EC classroom using NGSS-based lessons.

“STEM Environments”

Presenter: Monica Dolan, MA
The Children's Center at Caltech

Room: **Pasadena II**
Content: **STEM**
Target Audience: **I T P TK**

What does a STEM based environment look like? Join us as we look at what an intentional environment of science, technology, engineering, and math embraces. This will help educators understand the “why” behind materials and spaces and how to select the appropriate materials based on the child's interests and needs.

“STEM and Storytelling: Parallel Plotlines”

Presenter: Ruth Spiro, MBA
Independent Author

Room: **San Marino**
Content: **S**
Target Audience: **T P TK K F S**

Both provide opportunities for practicing skills such as sequencing and prediction. We'll explore the elements of "story" and their parallels to STEM in the classroom, and then discuss the publication process for aspiring authors.

“Supporting Science in Head Start – How to Create a Professional Development Plan that Engages Teachers, Children and Families”

Presenters: Lauren Van Derzee and Zoe Peters

Sciencenter/Bay Area Discovery Museum

Room: **San Diego**

Content: **S T E M**

Target Audience: **PK-K**

Learn how building and sustaining partnerships between science museums and Head Start provides teachers with professional development that empowers them to integrate science into their classroom.

“Blended Learning to Promote Mathematical Problem-Solving for Early Learners”

Presenters: Manjari Patel, MA, and Meredith Simon, MA

Mind Research Institute

Room: **Santa Barbara**

Content: **T M**

Target Audience: **P TK**

It's important to find a balance between technology and manipulatives for early learners. Learn how neuroscience can determine the elements of effective blended learning for mathematics for ages 3-5.

“Art, Snack, Nap, then Coding”

Presenters: Allison Wilson, AA, Vidya Janardhanan, BA, Candice Schreuders, BS

Stratford School

Room: **Santa Clara**

Content: **T**

Target Audience: **P K**

There is a new form of literacy that is taking place for our early learners and it's coding. Learn how to integrate the "T" in STEM through plugged and unplugged activities.

“Creative Curiosity: Modes of Transportation”

Presenters: Laura Schmidl, MA, and Maria Elena Serratos, BA

Discovery Cube

Room: **Santa Rosa**

Content: **S E M**

Target Audience: **T P TK K**

Discovery Cube presents an NGSS and Preschool Learning Foundations aligned interactive workshop focusing on creativity and encouraging curiosity while learning about scientific principles involved with various modes of transportation.

“Growing with STEM”

Presenters: Sandra Sewell, and Raema Avalos, BA

Centro De Ninos, Inc.

Room: **Del Mar**

Content: **S T E M**

Target Audience: **T P TK Bilingual**

We have produced videos for parents and preschool caregivers on STEM activities featuring some of our children in each video. The videos are in English and Spanish. They were made to introduce the concepts of STEM to the Latino Spanish Speaking Community to demystify STEM in a preschool or at home setting. Workshop will include viewing a selection of videos with discussion and handouts of lesson plans. Tips for approaching and engaging Spanish speaking parents in STEM.

“Engineering: Working Artfully”

Presenters: Pauline McPeake, MA and Ellen Khokha, MA

The Growing Place | Santa Monica College

Room: **Sacramento**

Content: **E**

Target Audience: **I T P**

The presenters will share the experience of a program wide intention to collaborate on the meaning and possibilities of “working artfully” with eager learners, infants thru Pre K to use investigation, competency, and skills to bring about results, a classic definition of engineering.

“Early STEM Skills, Beginning at Birth”

Presenter: Christina Nigrelli, MA, Ed.S

Zero to Three

Room: **San Gabriel**

Content: **S T E M**

Target Audience: **I T P**

The seeds of early STEM skills such as numeracy are planted early on through everyday activities that naturally introduce mathematical concepts and encourage the curiosity that makes young children ready-made scientists. Come learn how daily routines support problem solving, decision making, and creativity!

SESSION II: 1:00-2:30 PM

“Stopping and Starting: From Repetitive Motion to Intentional Design”

Presenters: Christine Richard, MA, and Ally Voye, BA

The Growing Place | Santa Monica College

Room: **Pacific A**

Content: **S E M**

Target Audience: **P**

Identifying the stopping and starting mechanisms that exist within a particular material can lead to new discoveries about the material's potential and provide an intentional platform for research.

“Framing Early STEM Learning”

Presenter: Susan Nall Bales, MA

FrameWorks Institute

Room: **Pacific B**

Content: **S T E M**

Target Audience: **P T K K F S**

This workshop will cover the FrameWorks Institute's extensive research into effective ways to frame early STEM learning to deepen public understanding of and build support for the issue.

“Invertebrates as the ‘Backbone’ of an Elementary Science Curriculum”

Presenters: Ilana April, MA, and Jean Rosenfield, MEd

American Museum of Natural History

Room: **Pacific C**

Content: **S**

Target Audience: **T P T K K F S**

Learn why invertebrates can serve as the “backbone” of any elementary-aged classroom and teach young students about diversity, respect, and inquiry-based skills of scientific thinking, observation and record making.

“Gardening”

Presenters: Olga Serrato, MA, Cathy Gish-Persi, Teresa Hovansyan, and Deborah Lutz

Los Angeles Valley College Child Development Center

Room: **Monterey**

Content: **S M**

Target Audience: **P Bilingual**

This workshop will emphasize the importance of giving children the opportunity to explore the outdoor environment and show how vegetables and fruits grow. Fruits and vegetables don't come from the super market.

"Fun Math for Dual Language Learners"

Presenter: Stephanie Suastegui,
English and Spanish Felt Stories and Songs

Room: **Pasadena I**

Content: **M**

Target Audience: **T P TK Bilingual**

Games, traditional stories, and songs are a great way to teach math! Participants will use hands on materials to explore games, traditional stories, and songs that teach classification, number and quantity, number sense of math operations, and measurement.

"The Art of Math and Science"

Presenter: Jayanti Tambe, MA
UCLA Early Care and Learning

Room: **San Marino**

Content: **S M**

Target Audience: **P TK**

Participants will look at art in the preschool classroom through the lens of scientific and mathematical experiences on a journey of exploring 19 artists from around the world.

"Teacher Curiosity: Messing about with STEAM Education"

Presenters: Lauren Weatherly, MA, and Alison Maher, MA
Boulder Journey School Teacher Education Program

Room: **San Diego**

Content: **S T E M**

Target Audience: **I T P TK K F S**

This presentation and workshop will share how teacher curiosity, inspired by the schools in Reggio Emilia, Italy, and American educators David and Frances Hawkins, provides powerful connections with children's thinking, learning, and inquiry.

"Engaging Preschoolers in STEM through Public Media: Resources, Supports, and Impacts"

Presenters: Naomi Hupert, MA, and Ximena Dominguez, Ph.D
Education Development Center

Room: **Santa Barbara**

Content: **S T M**

Target Audience: **P**

This workshop presents public media resources we have designed, used, and studied in our research work with preschoolers at school and at home to support math and science learning.

"Books, Blocks, and Building"

Presenters: Diana Zaragoza, MS
Sacramento City College

Room: **Santa Clara**

Content: **S E M**

Target Audience: **P TK K F S**

This workshop will introduce participants to children's literature that engages and inspires students to use their own imagination and creativity to follow floor plans and design their own creations.

"Developing and Sustaining Teachers and Students Curiosity: A Key Contributor to Success in STEM Disciplines"

Presenters: Laura Grandau, Ph.D, and Rebecca Itzkowich, MA

Erikson Institute

Room: **Santa Rosa**

Content: **S M**

Target Audience: **P TK K F S**

Participants will explore the nature and importance of curiosity and engage in activities that encourage pre- and in-service teachers and their students to develop and sustain an inquiry mindset.

“The Art of Asking Questions to Promote Curiosity and Scientific Inquiry”

Presenter: Dave Scahill and Jean Barbre, Ed.D

The Discovery Source | Orange County Department of Education

Room: **Del Mar**

Content: **S T E M**

Target Audience: **P TK K**

Join us as we examine a variety of questions and prompts that help promote children’s natural curiosity in STEM. Learn the Art of Asking Questions to promote children exploration and higher level thinking skills.

“Designing for Children to Design- Creativity in STE(A)M Learning”

Presenter: Cas Holman

Rhode Island School of Design (RISD)

Room: **Pasadena II**

Content: **T E**

Target Audience: **P TK K**

What better way for a child to master a tool than by inventing and building it first? How does innovation differ from invention in the experience of a child? Cas will discuss her approach to designing learning materials that allow children to experiment, try, fail, and create their own visions through open-ended collaborative play. She'll draw from her experience working with Anji Play schools in China, Rigamajig, and her Industrial Design students at Rhode Island School of Design (RISD).

“Sing, song, bounce, and jump”

Presenter: Dayita Datta

The Children’s Center at Caltech

Room: **San Gabriel**

Content: **M**

Target Audience: **P TK K F**

Tonal, rhythmic, and expressive experiences for young children using musical pattern recognition, which is an integral part of math skills. Pattern recognition through song-tales, echo songs, dance, bounces, tap, clap, and playing percussion instruments.

SESSION III: 3:00-4:30 PM

“What Happens When Air, Paper, and People Play Together? Making STEM an Integrated Part of Classroom Culture”

Presenters: Peggy Hafenberg, BA, and Ally Voye, BA

The Growing Place

Room: **Pacific A**

Content: **S M**

Target Audience: **P TK**

Embracing paper airplanes: A transitional kindergarten’s yearlong investigation into flight via air and paper.

“Using Improvement Science and Human Centered Design to Innovate in Early Childhood STEM”

Presenters: David Kanter, Ph.D, and Elizabeth Rood, Ed.D

100Kin10

Room: **Pacific B**

Content: **S T E M**

Target Audience: **P T K K F S**

100Kin10 will lead participants through a rapid-cycle prototyping process to identify solutions to some of the challenges faced by educators and schools in the early childhood STEM space.

“STEAM-ing Up Your Kindergarten Curriculum”

Presenters: Heather Jolly, BA, and Hallie Rosenblum, BA

Polytechnic School

Room: **Pacific C**

Content: **S T E M**

Target Audience: **TK K F**

Feeling overwhelmed with incorporating STEAM into your already existing curriculum?! We were! This workshop will show how we have studied our curriculum over the past years and found meaningful and functional ways to weave STEAM into our already existing curriculum. Be inspired with curriculum, photos of classrooms and playgrounds with STEAM in action, lesson plans and hands-on activities you can take back to your classroom to enhance your own program with STEAM elements.

“Big Science for Small Spaces”

Presenter: Vivian Belmont, BA

Dream Big Science and Art

Room: **Monterey**

Content: **S T E M**

Target Audience: **TK K F S**

BIG science in small places is possible! The how, what and why of open - ended STEM exploration in the classroom with materials that won't break the bank!

“Exploring Curiosity: A Hands-On Science and Math Approach”

Presenters: Maria Elena Serratos, BA, and Laura Schmidl, MA

Discovery Cube

Room: **Pasadena I**

Content: **S M**

Target Audience: **T P TK K Bilingual**

This hands-on Spanish workshop will integrate a storybook with science and math lessons while offering ideas on how to encourage curiosity as early learners explore recycled and reusable materials.

Este taller práctico integrará un cuento con lecciones de ciencias y matemáticas y se ofrecerán ideas para promover la curiosidad en los niños mientras exploran con materiales reciclados y reusables.

“Delivering on the Promise of Connected Play: Early Learning STEM and Digital Storytelling”

Presenter: Azadeh Jamalian, Ph.D

Tiggly, Teachers College, Columbia University

Room: **Pasadena II**

Content: **M**

Target Audience: **T P K**

Connected technologies bring fundamental tactile play with manipulatives into students' digital learning. Together, the combination of physical and digital, brings endless opportunities for early learning STEM which will be discussed in this workshop.

“Supporting Parents, Particularly Spanish-Dominant Parents, in Promoting Preschool Readiness – Through STEM Explorations”

Presenters: Maryann Marrapodi, Ed.M, and Sylvia Toledo, BA
Hispanic Information & Telecommunications Network (HITN)

Room: **San Marino**

Content: **STEM**

Target Audience: **P**

Explore strategies to engage families in promoting school readiness through activities that develop STEM language, content and skills. Hands-on materials will scaffold rich discussions for engaging families with STEM.

“Supporting Math and Science in the Early Years: Using Nature connections to Strengthen Foundational Learning For all Ages”

Presenter: Heather Fox, MA
Dimensions Educational Research Foundation

Room: **San Diego**

Content: **STEM**

Target Audience: **I T P TK**

Nature-based outdoor spaces foster children’s inborn desire to learn. Examine the STEM concepts that children demonstrate in nature. Strategize how to transform outdoor spaces to support this authentic, inquiry-based learning.

“Hello Robo! Developing a Conceptual Framework for Student Understanding of Robots”

Presenter: Wendy Brenneman, BA
Carnegie Science Center

Room: **Santa Barbara**

Content: **TE**

Target Audience: **P TK K**

Ready to implement robotics activities, but don't have a robot yet? Explore three developmentally-appropriate concepts to prepare early learners for an understanding of robotics, and design relevant hands-on investigations you can do right away.

“Beyond the Block Center: Inquiry-Based Engineering in Early Childhood”

Presenter: Brittany Oliver, MA
Fight for Children

Room: **Santa Clara**

Content: **TEM**

Target Audience: **P TK K**

This workshop will provide an overview of the STEM inquiry cycle and offer practical advice for planning and implementing inquiry-based engineering investigations in the early childhood classroom.

“Using STEM as A Context for Understanding Addition & Subtraction ”

Presenters: Sara Delano Moore, Ph.D, and William Bintz, Ph.D
SDM Learning | Kent State University

Room: **Santa Rosa**

Content: **M**

Target Audience: **TK K F S**

To make operations meaningful, students must understand the situations where we use them. Learn about high-quality picture books and STEM engagements which support primary students’ understanding of addition and subtraction.

“STEM Skills in an Outdoor Classroom with Infants and Toddlers”

Presenter: Cathy Bell, BS

Child Educational Center

Room: **Del Mar**

Content: **S T E M**

Target Audience: **I T**

Children are born scientists! Discover the ways that STEM learning is supported in an Outdoor Classroom with infants and toddlers and how teachers can facilitate and articulate foundational skill development

“STEM ... MM!”

Presenters: Patty Clarkson, Ed.D, and Kari Applegate, MA

Cal Poly Preschool Learning Lab

Room: **San Gabriel**

Content: **S T E M**

Target Audience: **P TK**

Come discover how music and movement can be easily incorporated into the STEM learning process! Hear about the STEM learning process at Cal Poly Preschool Learning Lab and how we use music and movement to reinforce children's understanding of any concepts we are exploring. During this session, you will gain the knowledge and experience to create your own original STEM...MM songs to strengthen learning at your center.

Saturday, February 4th 2017

Panel of Experts 8:30 AM - 10:00 AM

Dr. Chip Donohue, Ph.D.

*Dean of Distance Learning and Continuing Education Director, TEC Center
Member, Fred Rogers Center Advisory Council*

Susan Nall Bales, M.A.

Founder, Board Chair, and Senior Advisor Frameworks Institute

Peggy Ashbrook, BA

*Early Childhood Science Teacher
The Early Years Columnist: Science and Children Author: Science is Simple*

Dr. Elisabeth McClure, Ph.D.

*Research Fellow
Joan Ganz Cooney Center at Sesame Workshop*

SESSION I: 10:30 AM - 12:00 PM

“Coding Made Simple”

Presenter: Candice Schreuders, BS

Stratford School

Room: **Pacific A**

Content: **T**

Target Audience: **P TK K**

How do I teach pre-coding skills to young children? Connecting the standards, the NAEYC, and the Fred Rogers technology statement to your classroom. Collaborate and take away coding lessons to implement tomorrow!

“Nature Nurtures Outdoor STEM Learning: Botany and Life Science Lessons for the Early Childhood Education Classroom”

Presenter: Carrie Lynne Draper, MEd

Readiness Learning Associates

Room: **Pacific B**

Content: **S T E M**

Target Audience: **P TK K F S**

Gardening is just another form of play for young children. What happens below the surface fosters opportunities to grow children’s botany & life science interest. Centers focusing on the Inquiry Process (Observe, Question, Collect Evidence, Analyze, and Communicate) will be used in this interactive workshop. Participants will take away lessons and strategies ready to use with young learners.

“Woodworking with Children: Engineering a Strong Image of Children”

Presenter: Amy Bice, AA, and Cindy Nelsen

The New School West

Room: **Pacific C**

Content: **E M**

Target Audience: **P TK**

Throughout the years of woodworking with preschool children many projects have emerged that have required the children's engineering and mathematical skills. The long term projects revealed a need for a richness of material experiences and environment that created a foundation of resources including wood. We look at wood as one of the resources for creating educational moments that extend children's curiosity through a scientific and collaborative approach to learning.

“How Many? Counting is More Complex than Meets the Eye. ¿Cuántos Hay?- Contar es más complejo de lo que parece.”

Presenter: Rebecca Itzkowich, MA

Erikson Institute

Room: **Monterey**

Content: **M**

Target Audience: **P Bilingual**

Learning to count is complex. In this interactive session we will explore the Big Ideas behind what young children need to understand to be able to respond to the question: How many?

“What's up with the Superheroes? ”

Presenter: Shalek Chappil-Nichols, MS

Truth Consulting

Room: **Pasadena I**

Content: **S T E M**

Target Audience: **P TK K**

In this workshop teachers will learn how to use the superhero movement to engage in STEM ideas and positive social emotional thinking.

“Family Engagement: Creating a Culture of Curiosity”

Presenter: Alesha Henderson and Marianne Kelly

Lakeshore Learning Materials

Room: **San Marino**

Content: **S E M**

Target Audience: **P TK K F S**

Families love to do projects, as long as they have some guidance and some creative options. In this workshop, we offer strategies to get and keep families involved.

“Constructivism, Critical Thinking, and Creativity: Exploring a Civil Engineering Project with Young Children”

Presenters: Tom Chiaromonte, Ph.D, and Jenn Kinkel, MA

Fullerton College

Room: **San Diego**

Content: **E**

Target Audience: **P**

When preschool children are provided with ample materials, competent teachers, and time, they are capable of constructing elaborate, creative, engineering designs. A year-long project will be explored in this workshop.

“Touching Rock Museum: Curating Engagement”

Presenter: Alex Cruickshank, MA, and Lauren Weatherly, MA

Boulder Journey School/ Hawkins Centers of Learning

Room: **Santa Barbara**

Content: **S M**

Target Audience: **P TK**

This presentation follows a group of children as they design, build, and utilize a museum of rocks. We pay close

attention to the children's natural inclination to include mathematics, using inspirations from the schools in Reggio Emilia, Italy and Frances and David Hawkins.
Participants will engage with hands-on materials.

“Tinkering in the Classroom STEAM Lab”

Presenter: Sara Cooper, BA, and Brenda Ramos, BA

Fullerton Elementary School District

Room: **Santa Clara**

Content: **S T E M**

Target Audience: **P T K K F S**

Hands on approach on methods to integrate a Reggio inspired constructivist classroom STEAM Lab. Hands on investigation of materials in multiple contexts that provokes a child's natural curiosity and learning multiple approaches to problem solving.

“Finding, Fueling, and Flexing Curiosity: Using the Scientific Method to Explore Children's Worlds”

Presenter: Carrie Rothstein-Fisch, Ph.D, and Katie Leon, MA

California State University, Northridge

Room: **Santa Rosa**

Content: **S T M**

Target Audience: **P T K K F S**

Explore how to use children's natural curiosities to engage them in the scientific processes of observation, hypothesis development, testing, documentation, and reporting.

“Understanding Change and Growth over Time”

Presenter: Olivia Garcia, BA, and Gretchen Kammerer

The Children's Center at Caltech

Room: **Del Mar**

Content: **S T E M**

Target Audience: **P T K**

How do children process change and growth? Join us as we explore living organisms such as humans, insects, plants and their life cycle. See how we couple math with the seasons, weather, and properties involving long term documentation. This workshop will give an insight of how to implement curriculum into your three year old classroom.

“Setting Up Your Environment for Success (A STEM Environment)”

Presenter: Joshua Alvarez, BA

Kaplan Early Learning Company

Room: **Sacramento**

Content: **S T E M**

Target Audience: **T P K**

Attendees will explore innovative ways of setting up the environment as a learning tool for intentional teaching and implementation. We will focus on proper analysis, reasoning, and exploration.

“Early Exploration into STEM”

Presenter: Jean Barbre, Ed.D

Orange County Department of Education

Room: **San Gabriel**

Content: **S T E M**

Target Audience: **I T**

Beginning at birth children are naturally curious about the world and they are busy learning the principles of STEM. Explore with us activities and materials to help promote curiosity and exploration in STEM for infants, toddlers, and

twos.

SESSION II: 1:00-2:30 PM

“STEM for Dual Language Family Childcare Providers from A to Z”

Presenter: Raissa Lee, BA, and Savannah Smith

ABC Mom Learning Center & Childcare

Room: **Pacific A**

Content: **S T E M**

Target Audience: **T P**

ABC Mom Learning Center & Childcare is excited to share how they have implemented a successful and engaging dual language STEM early education program for students and their families.

“Engineering in Action: The Teacher’s Role in Fostering Tinker Thinking”

Presenter: Constant Hine, MA

Kodo Kids

Room: **Pacific B**

Content: **E**

Target Audience: **P TK K**

Identify ways engineering is happening every day in the classroom and how to facilitate those experiences through play and investigation to intentionally foster engineering play behaviors. Come learn with hands-on materials!

“Coding is the New Literacy: Get Curious with PBS Kids Scratch Jr.”

Presenter: Alison Dorff, BS, and Susie Grimm, MPA

PBS SoCal

Room: **Pacific C**

Content: **S T E M**

Target Audience: **K F S**

Coding is a new type of literacy important to help develop math and problem solving skills. This workshop will provide attendees with fun and engaging tips and resources to implement PBS KIDS Scratch Jr. as a way to introduce kids to computational thinking needed for the 21st century. Bring Your Own Mobile Device (BYOMD).

“Cooking for All Ages”

Presenter: Emily Kraemer, BA, and Peggy Liu, BA

Orange Coast College, Harry & Grace Steele Children’s Center

Room: **Pasadena I**

Content: **S T M**

Target Audience: **I T P TK**

Think cooking is just for school-agers and adults? Think again! Come and learn about food science for young children. Get ready to be hands-on and receive recipe handouts!

“Preschoolers Journey in Creating a Recipe: Arriving at a Recipe for All Learning”

Presenter: Iwona Dziag, MA

Branches Atelier Preschool

Room: **Pasadena II**

Content: **S M**

Target Audience: **P TK K**

How is meaningful scientific inquiry defined and enacted in a preschool classroom? How do children make meaning about scientific and mathematical concepts? Learn about resource-based classroom inquiry by watching children design and revise their recipe.

“Variation: Constructing Knowledge About the World Around Us”

Presenter: Amanda Lawson, BA, and Angeline Picasso

The Children’s Center at Caltech

Room: **Monterey**

Content: **S T E M**

Target Audience: **T**

Since infants learn best by exploring their bodies and their environment, we created a curriculum that allowed them to do so. This year the Bunnies focused on variation. The children explored, discovered, investigated, and experienced shape, color, texture, size and weight, and learning about who they are and the world around them.

“Building STEAM throughout the Day: Making the Most of their Curiosity”

Presenter: Alesha Henderson and Marianne Kelley

Lakeshore Learning Materials

Room: **San Marino**

Content: **S T M**

Target Audience: **P T K K F S**

STEAM is more than just a center or a time, it’s an approach. We will explore how to implement STEAM in your literacy time, your block center, dramatic play and even in music. Seamless integration equals success, all day!

“Help: We Speak Different Languages”

Presenter: Jenne Ring, MA

Pasadena City College

Room: **San Diego**

Content: **S T E M**

Target Audience: **P T K**

Handouts and discussion for teachers to help parents understand the common language/vocabulary /terms associated with STEM.

“Fairy Tale Engineering: An Introduction to Design Thinking in the Early Childhood Classroom”

Presenter: Cami Gordon, Ed.M

Bay Area Discovery Museum

Room: **Santa Barbara**

Content: **E**

Target Audience: **TK K F S**

Think it, Make it, Try it! Engage in creative problem solving through engineering design. Gain tools to help students: identify characters’ needs, design solutions, and bring prototype ideas to life.

“25 STEAM Activities”

Presenter: Yolanda Carlos, MEd and Robert Boyman, MA

Pacific Oaks College

Room: **Santa Clara**

Content: **S T E M**

Target Audience: **P T K K**

This workshop will provide attendees with hands-on activities they can integrate into their programs. Attendees will be able to take home 25 activity ideas in an information packet.

“Echoes of Reality; Exploring Digital Landscapes, Immersive Projection, and Virtual Reality”

Presenter: Jennifer Kesserling, BS, and Jennifer Norviel, BA

Riverfield Country Day School

Room: **Santa Rosa**

Content: **T E**

Target Audience: **I T P T K K**

Technology offers possibilities for children to seamlessly interweave both the physical and virtual worlds. This presentation explores the limitless potential of digital environments through the lens of our youngest digital citizens.

“Sewing, Weaving, and Visual Patterning”

Presenter: Olivia Garcia, BA, and Daniela Perez

The Children’s Center at Caltech

Room: *Del Mar*

Content: **S T E M**

Target Audience: **PK-K**

Sewing, stitching, and weaving can be done with toddlers and preschoolers! Participants will understand the process of introducing basic concepts of sewing to young children and how it relates to literacy and math. With activities from looms, hand stitching, quilts, pillows and more, teachers will be inspired with ways to bring it back to their classrooms.

“STEM, STEAM and 21st Century Block Play”

Presenter: Linda Kahrs

Tout about Toys

Room: **Sacramento**

Content: **S T E M**

Target Audience: **P T K K**

A properly designed block center provides key skill development opportunities such as; creativity, communication, critical thinking and collaboration. It also provides a platform for social development, physical development, STEM, STEAM, and creative expression. Learn how magnetic building systems are playing a key role in changing the way we think about block play in the 21st century preschool classroom.

“Sing, Play and Dance Creative and Improvised Patterns by Exploring Math in Music”

Presenter: Dayita Datta

The Children’s Center at Caltech

Room: **San Gabriel**

Content: **M**

Target Audience: **P T K K F**

This music and movement workshop will focus on the use of mathematical intelligence and awareness by pattern recognition through singing games, song-tales, echo songs, pitch exploration, listening, using props, folk dance, tap, clap, and playing patterns on non-pitched percussion instruments, Soprano Recorder and pitched barred instruments. This workshop encourages and nurtures teachers to carry out age appropriate STEM based music sessions which are fun, creative and appropriate for building strong foundation of language and social- emotional development for preschool and elementary children.

SESSION III: 3:00-4:30 PM

“Utilizing Free Resources”

Presenter: Peggy Ashbrook, BA

National Science Teachers Association

Room: **Pacific A**

Content: **S T E M**

Target Audience: **PK-K**

“Free Resources” means everything from the empty egg carton to the public library to the teacher next to you. Learn how to find free resources online from the National Science Teachers Association (NSTA) and the National Association for the Education of Young Children (NAEYC), connect with your local children’s librarian, forage for materials from nature and use the many re-usable

packing products that are usually thrown away or recycled. Using photographic examples and a resource list, teachers will go home with a new appreciation for how easily free resources are available. We will handle examples from a preschool classroom. If materials are provided by the conference organization, this session can include a make-and-take section.

“Tinkering with Tops: Exploring Physics of Rotational Motion”

Presenter: Beth Dykstra Van Meeteren, Ed.D

University of Northern Iowa

Room: **Pacific B**

Content: **S T E M**

Target Audience: **P T K K**

Children explore lines of symmetry along an axis and other variables that affect rotational motion such as the size, shape, and weight of the top body and its placement on the spindle.

“Sort it all Out”

Presenter: Sandra Silverman, MS

Consultant

Room: **Pacific C**

Content: **S T M**

Target Audience: **P T K K**

Through fun hands-on experiences you will learn the developmental sequence for sorting and classifying, techniques to support children's learning, and the language-math-science connection that are the basis for STEAM.

“Music in Early Childhood STEM Series”

Presenters: Dete Meserve and Craig Bartlett

Ready, Jet, Go

Room: **Monterey**

Content: **S T E M**

Target Audience: **T P T K K F S**

Ready, Jet, Go creator Craig Bartlett, composer Jim Lang, and producer Dete Meserve will demonstrate how to use music to help teach STEM ideas.

“Using the 5E's to Teach Toward the Next Generation Science Standards: Science Inquiry in the Early Years”

Presenter: Linda Froschauer, MA

National Science Teachers Association

Room: **Pasadena I**

Content: **S T**

Target Audience: **P K F S**

Experience the 5E strategy for developing STEM conceptual understanding and ways of thinking. This hands-on workshop will highlight each phase of the 5E and connect learning to the NGSS.

“Light and Sound with Toddlers”

Presenter: Retha Jones, BA and Vanessa Guerra

The Children's Center at Caltech

Room: **Pasadena II**

Content: **S T E M**

Target Audience: **T**

Join us as we look into the properties, color, mediums, and sources of light, shadow, and, sound. We will explore illumination, reflection, the environment, and more with light sources and the relationships that occur.

“Inclined to Lend a Hand: Explaining and Visualizing STEM Concepts from The Little Engine that Could

with American Sign Language (ASL)”

Presenters: James Maloney, MS, and Julius Su, Ph.D

Su-Kam-Intelligent-Education-Systems (SKIES)/Pasadena City College/ Community Science Academy

Room: **San Diego**

Content: **S T E M**

Target Audience: **T P T K K**

Communicating simple machines with hands-on activities and hands-on language. Practice ASL STEM strategies that also promote pro-social classroom management. Walk away with your experiences through the collaborative learning app, SKIES.

“Recognizing and Supporting Young Children’s Scientific Curiosity”

Presenter: Emily Slusser, Ph.D, and Mario Fusaro, Ed.D

San Jose State University

Room: **Santa Barbara**

Content: **S**

Target Audience: **I T P**

This research-based session will use video vignettes to explore how children learn about science and engage in scientific inquiry. Activities will focus on supporting children’s conceptual development and natural curiosity.

“Ordinary to Extraordinary: Program-wide Transformation through STEAM Activities”

Presenter: Stephanie Lester, MA, and Linda Brown, MA

Antelope Valley College / Lancaster School District

Room: **Santa Clara**

Content: **S T E M**

Target Audience: **P T K K**

This hands-on workshop will provide step by step guidelines demonstrating how to set up, manage and sustain a program-wide implementation of project-based learning utilizing STEAM activities.

“Dancing Robots”

Presenter: Amanda Sullivan, Ph.D

DevTech Research Group at Tufts University

Room: **Santa Rosa**

Content: **T E**

Target Audience: **P T K K F S**

Gain a hands-on introduction to the KIBO robot, designed for children ages 4-7. Participants will explore building and programming in order to create dancing robots with sensors, motors, and wheels.

“Systems and Interactions in our Community”

Presenter: Janet Nunez, BA, and Ingrid Ellegaard-Hansen, BA

The Children’s Center at Caltech

Room: **Del Mar**

Content: **S T E M**

Target Audience: **T P**

This workshop will show how children gained experience, discovered, and investigated different aspects of the world around them. Journey through a curriculum based on systems and interactions in our very own “backyard.”