Space Interferometry Mission: A Stellar Mission

S. R. Kulkarni
Interdisciplinary Scientist
SIM Science Team

Accurate & Precision Astrometry

- Wide Angle Astrometry:
 - Parallaxes (Distance)
 - Proper Motions (Masses, Kinematics)
- Narrow Angle Astrometry:
 - Masses of Stars
 - Planets (Orbits, coplanarity, masses)

SIM: Proven, Timely, & Synergistic

- Demonstrated sub-microarcsecond precision
 - This laboratory demonstration lies at the heart of the mission
- The SIM Project has met all Technical Milestones
- SIM has been validated by two decadal reports, two roadmap studies,
 & most recently an astrometric approach to planet finding has been endorsed by *ExoPlanet Task Force*
- SIM is ready to move to Phase C
- SIM could make 2013-2023 the decade of extra-solar planets
 - SIM & COROT and Kepler
 - SIM & GAIA
 - SIM & JWST
 - SIM & TPF-C, TPF/Darwin
- SIM-GAIA would define the state of art in wide field astrometry

Schedule of Talks

- Michael Shao "Technology Breakthrough"
- Chas Beichman "Planets: Small, Medium & Large"
- Todd Henry "SIM: A Stellar Mission"
- Ron Allen "Interferometry: A Stellar Methodology"
- Questions & Answers