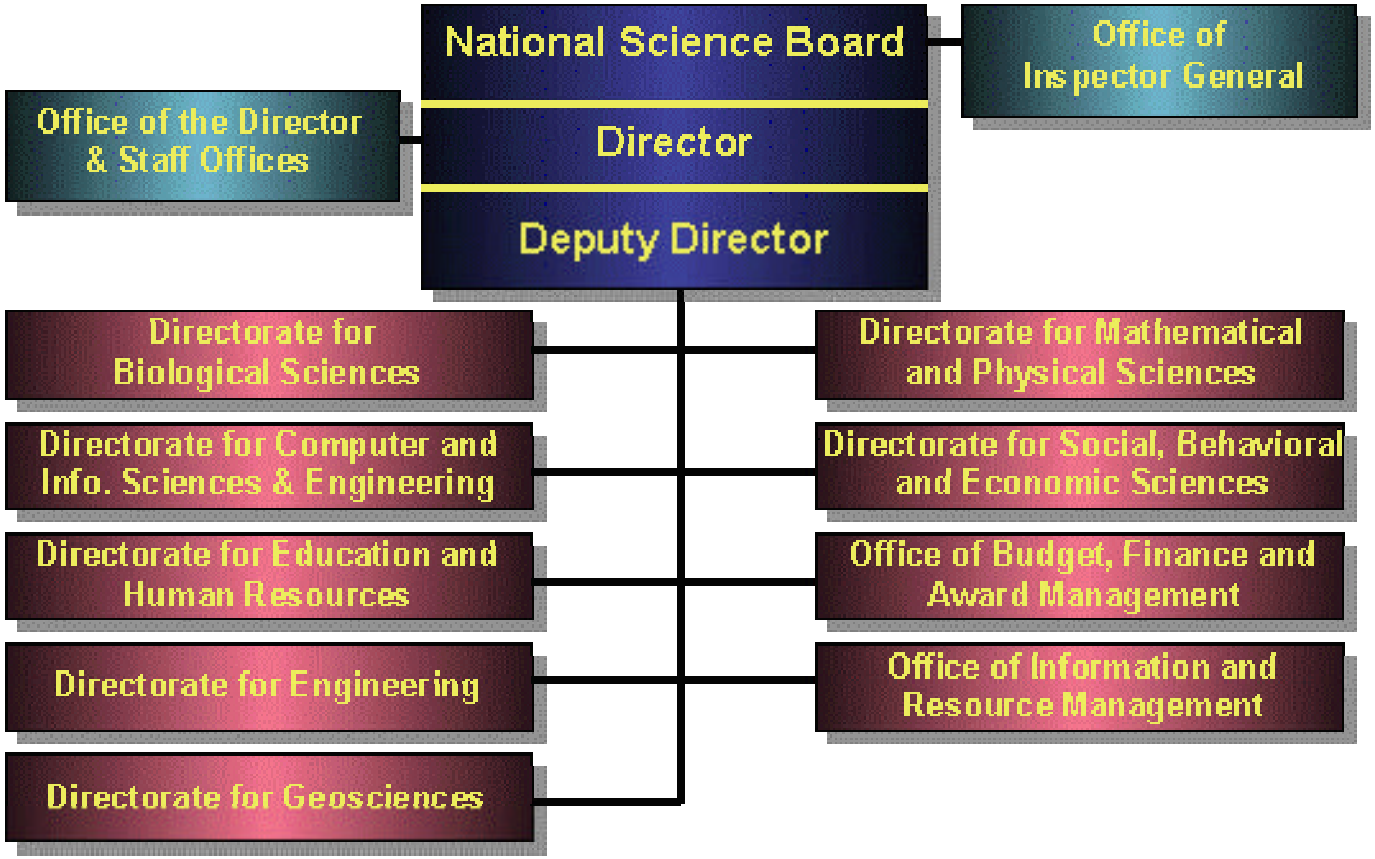
FY 2003 Budget Submission

Directorate for Mathematical
And Physical Sciences

National Science Foundation

March 14, 2002

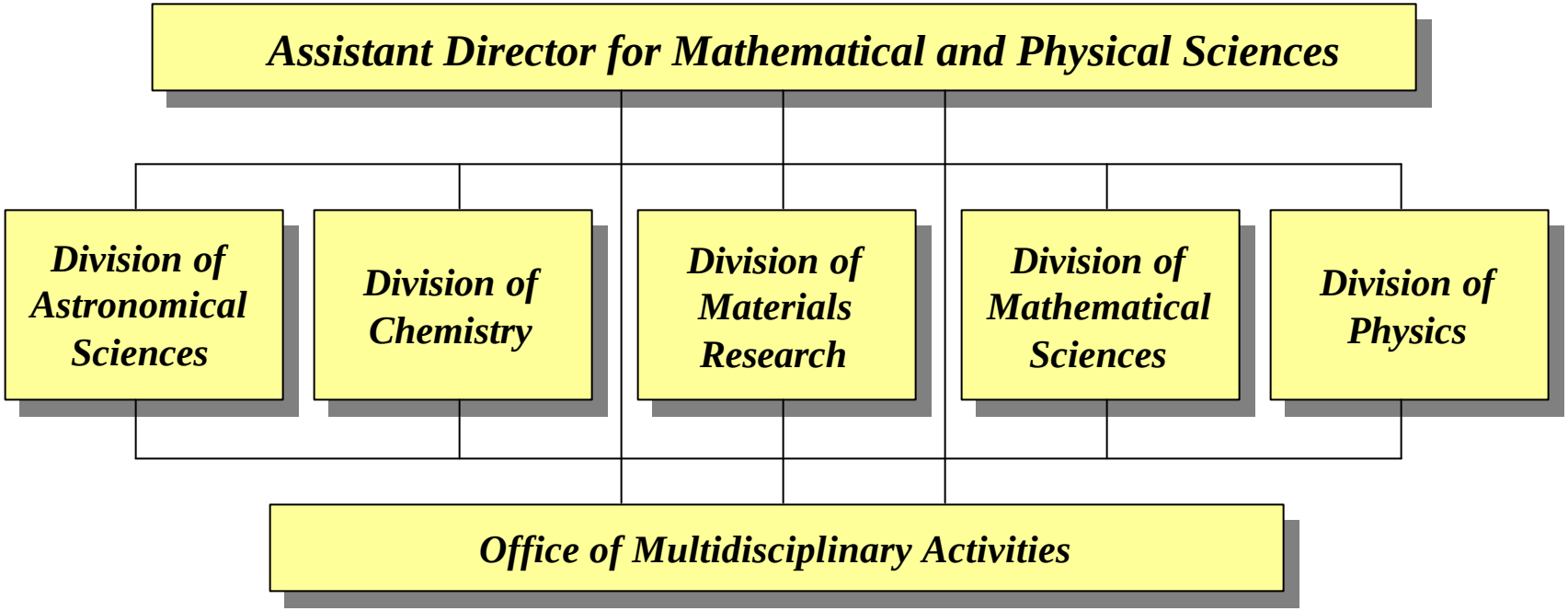
National Science Foundation



NSF's Strategic Goals

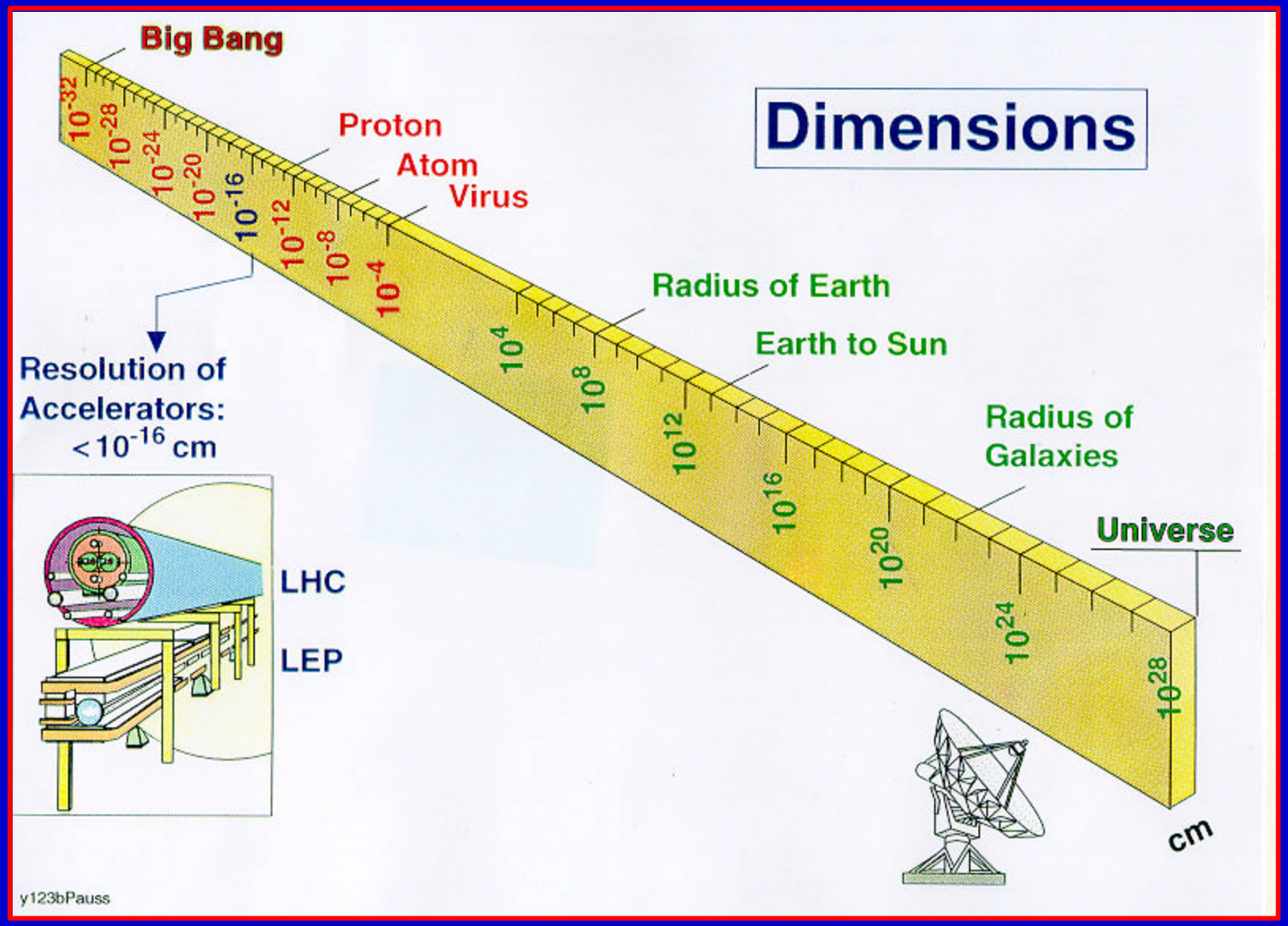
- People - *Diverse, internationally competitive and globally-engaged workforce*
- Ideas - *Discovery across frontiers and connections to society*
- Tools - *Accessible, state-of-the-art information bases and shared tools*

Directorate for Mathematical and Physical Sciences



The MPS Portfolio

- Mathematical Sciences
- Origins of the Universe
- Quantum Science and Engineering
- Molecular Connections
- Integrating Research with Education
- Tools



(By Felicitas Pauss)

Number of People Involved in MPS Activities

	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate
Senior Researchers	6,132	6,400	6,400
Other Professionals	1,121	1,170	1,170
Post-Doctorates	2,148	2,240	2,240
Graduate Students	6,192	6,400	6,400
Undergraduate Students	3,051	3,200	3,200
K - 12 Students	285	285	285
K - 12 Teachers	668	700	700
Total Number of People	19,597	20,395	20,395

MPS spends at least $300 million annually on Graduate and Post-Doctoral Training!

MPS Budget Request

$$ in Millions

	FY2001 Actual	FY 2002 CP	FY 2003 Request	Change $ 03/02	Change % 03/02
AST	$148.74	$165.86	$161.25	-$4.61	-2.8%
CHE	154.28	162.89	160.80	-2.09	-1.3%
DMR	209.67	219.51	219.32	-0.19	-0.1%
DMS	121.44	151.48	181.87	30.39	20.1%
PHY	187.54	195.88	193.31	-2.57	-1.3%
OMA	32.41	24.83	25.02	0.19	0.8%
Total: MPS	$854.08	$920.46	$941.57	$21.12	2.3%

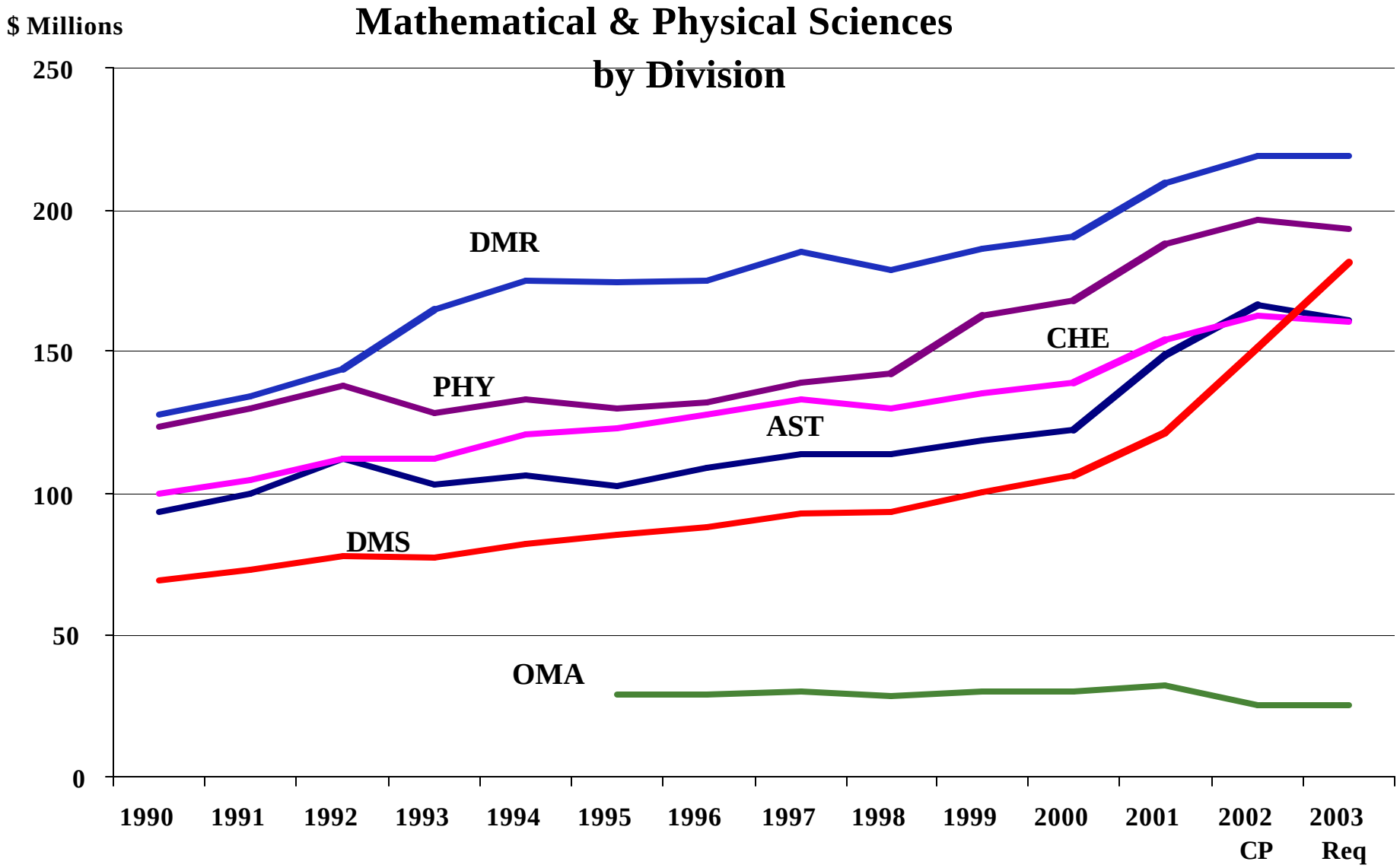
NSF Priority Areas in MPS

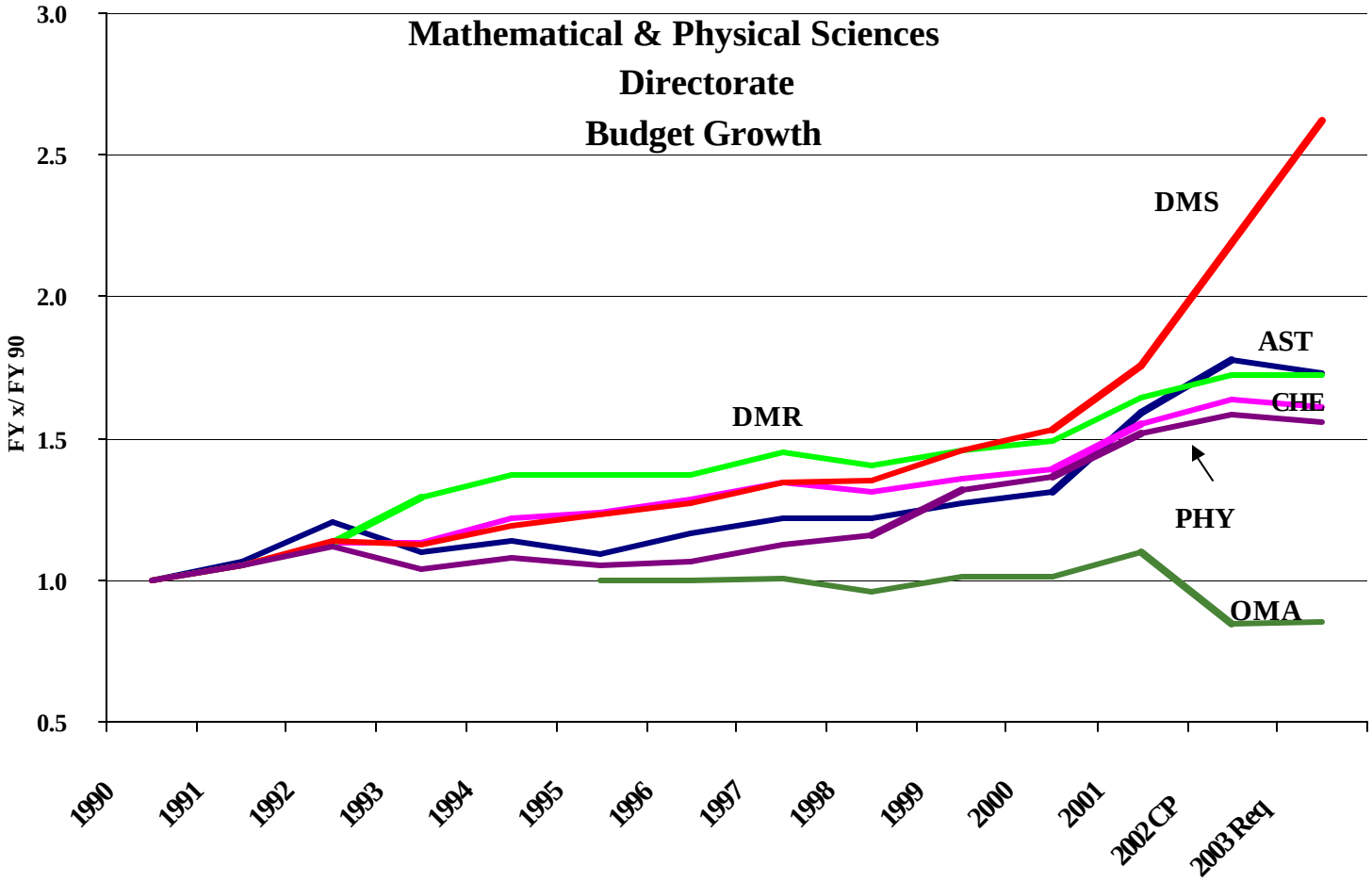
(Dollars in Millions)

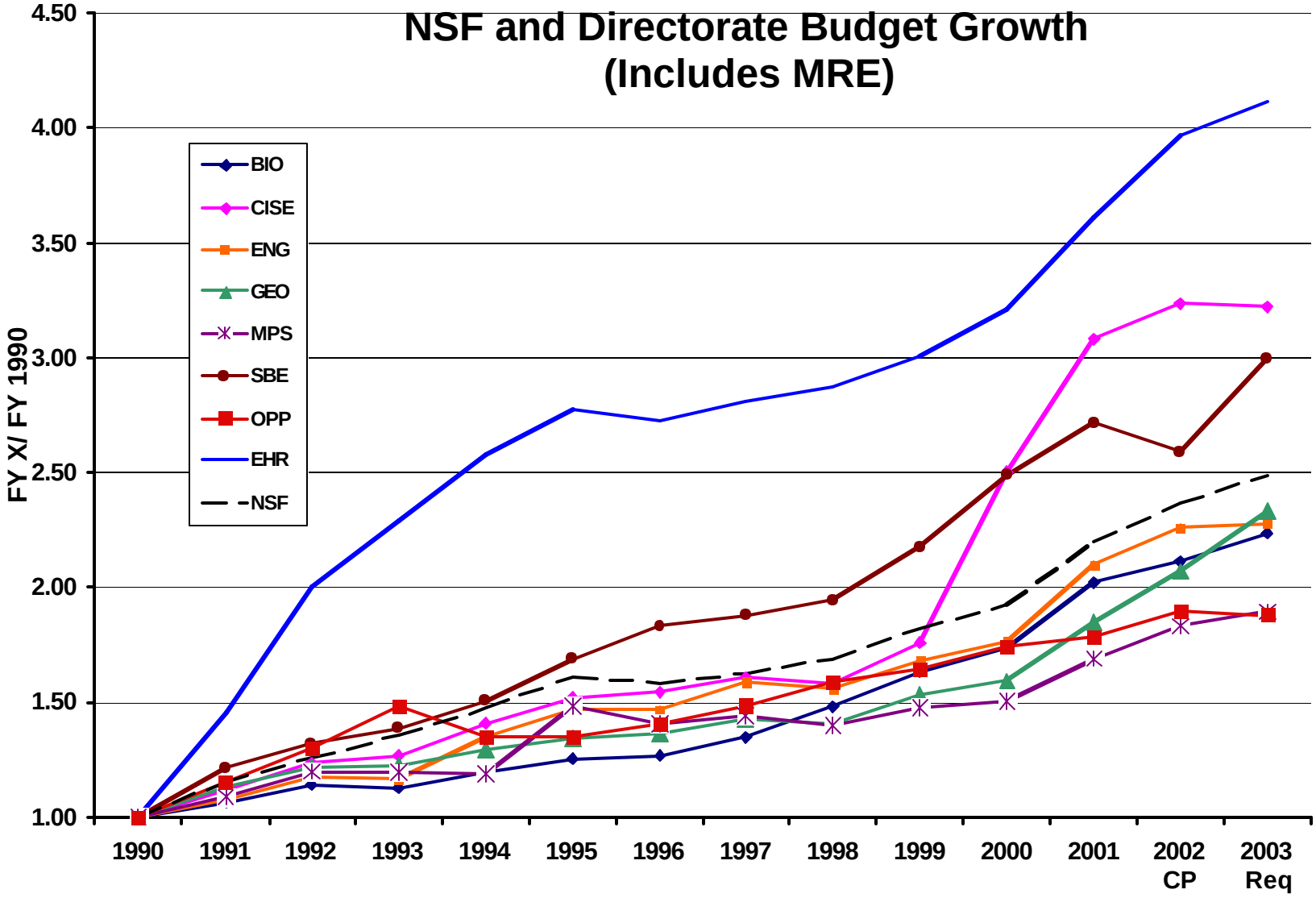
	FY 2002 Plan	FY 2003 Request	Percent Change
Biocomplexity in the Environment	$5	$5	-12.1%
Information Technology Research	$33	$36	7.4%
Nanoscale S&E	$92	$104	12.9%
Mathematical Sciences	$30	$47	58.0%
Learning for the 21st Century Workforce	$5	$6	19.4%

Mathematical Sciences Priority Area

- $47.39 million emphasis recognizing the critical role of mathematics in advancing interdisciplinary science
- Initial Focus Areas:
  - Management of large data sets
  - Modeling of uncertainty
  - Modeling and prediction of complex non-linear systems


Mathematical & Physical Sciences
by Division
$ Millions
250
200
150
100
50
0
DMR
PHY
AST
CHE
DMS
OMA
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
CP
2003
Req


Mathematical & Physical Sciences
Directorate
Budget Growth
FY x/ FY 90
3.0
2.5
2.0
1.5
1.0
0.5
DMS
AST
CHE
DMR
PHY
OMA
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002 CP
2003 Req


NSF and Directorate Budget Growth
(Includes MRE)
FY X/ FY 1990
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
BIO
CISE
ENG
GEO
MPS
SBE
OPP
EHR
NSF
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002 CP
2003 Req