

Funding for Free Application Projects in Recent Years

Unit: 10,000 yuan

Scientific Division	Discipline	FY 2003			FY 2004		
		Projects Number	granted Funds	Rate (%)	Projects Number	granted Funds	Rate (%)
Division of Mathematical Science	Basic mathematics	106+8*	1,701	33.2	113+10*	1,975	32.6
	Applied mathematics and computational mathematics	64+4*	1,012	28.9	84+5	1,465	31.4
Division of Astronomy	General mechanics	22+2*	565	34.8	26+3*	648	25.7
	Solid mechanics	68+9*	1,932.75	24.4	81+8*	2,301	24.3
	Fluid mechanics	28+5*	785	25.4	37+3*	989	26.5
	Interdisciplinary mechanics	19+2*	542	25.0	25+1*	671	27.1
	Joint Fund of Aeronautics	18	380	25.4	19	380	21.8
Division of Mechanics	Astrophysics	29+4*	1,008	35.1	31+2*	1,137	33.3
	Astronomical measurements and celestial mechanics	6+1*	148	31.3	3	90	21.4
Division I of Physics	Condensed matter physics I	22+1*	603	30.7	25+2*	709	23.7
	Condensed matter physics II	50+4*	1,409	25.0	67+3*	1,861	27.7
	Atomic and molecular physics	18+1	462	27.9	23+2*	648	28.1
	Optics	35+1*	980	28.3	35+3*	1,000	26.0
	Acoustics	16+2*	457	30.5	20+2*	599	29.7
Division II of Physics	Basic physics	19+3*	425	39.6	14+4*	336	24.3
	Particle physics and field theory	14	292	36.8	25+1*	557	38.8
	Nuclear physics and nuclear technology and application	57+3*	1,471	31.4	61+6*	1,889	32.2
	Particle physics and experimental facilities for nuclear physics	12+1*	424	28.3	14+1*	451	23.1
	Plasma physics	22+3*	414	31.6	30+1*	886	33.3
	Joint Fund	47	1,120	39.8	35	991	38.5
Total		715	16,430.75	29.8	825	19,583	28.7
Average funding per project			23.0 (24.1**)		23.6 (24.6**)		

Notes: * Projects of Small Fund for Exploratory Studies.

** Not including projects of Small Fund for Exploratory Studies.

Funding for Free Application Projects in Year 2005

Department	Application Items	Approved				
		Items	Approve Rate (%)	Total Amount (10,000 CNY)	Rate in the NSFC (%)	Average Amount (10,000 CNY)
Department of Mathematical and Physical Sciences	3,307	978	29.57	26,742	11.87	27.34
Department of Chemical Sciences	4,281	984	22.99	24,331	10.80	24.73
Department of Life Sciences	21,408	3,344	15.62	80,240	35.63	24.00
Department of Earth Sciences	3,663	881	24.05	29,101	12.92	33.03
Department of Engineering and Materials Sciences	8,305	1,425	17.16	35,590	15.80	24.98
Department of Information Sciences	5,123	1,050	20.50	22,166	9.84	21.11
Department of Management Sciences	3,239	427	13.18	7,048	3.13	16.51
Total	49,326	9,089	18.43	225,218	100.00	24.78

Chosen Guide For Application Projects of NSFC for year 2006

Department of Mathematical and Physical Sciences

General Program:

Main support area: *Symbolic Logic and Foundations of Mathematics, Number Theory, Algebra, Geometry, Topology, Function Theory, Functional Analysis, Modern Mathematical Physics, Ordinary Differential Equations and Dynamical Systems, Partial Differential Equation, Probability and Mathematical Statistics, Cybernetics, Discrete Mathematics, Computational Mathematics, Large Scale Scientific and Engineering Computing, Mathematical Physics, Mathematical Theory and Methods in Operational research, other edge subject in Mathematics, Mathematical Modeling and new arithmetic.*

Key Program:

Manifold topology

Main research field:

- 1) Establish an effective algorithm about computation Li Groups and Homogeneous spatial autocorrelation Cohomology Ring and Chow Ring.
- 2) Computation about stable homotopy group, Research of Cobordism theory and K-theory

Biology Informatics and Optimization Computing Methods

Main research fields:

Using optimization Computing Methods to research Biology Informatics problems

- 1) Some related problem in genetic engineering
- 2) Prediction of protein structure and molecular docking.
- 3) Systems biology research
- 4) Some related problem in Bioinformatics

Linear and Nonlinear Numerical Algebra problem research in Scientific Computation

Main research fields:

- 1) Effective Algorithm of Linear and Nonlinear Equations.
- 2) Numerical solution for algebraic inverse eigenvalue problem
- 3) High rank algebra equation high precision arithmetic
- 4) Numerical Methods of Nonlinear least squares problem
- 5) Numerical Methods of structure matrix eigenvalue.