

## Proposed Swedish Space Research Programme 2004

### Available budget

<b>Firm SRAC budget for 2004</b>	<b>47 000 kkr</b>
<b>Remaining from budget of 2003</b>	<b>3 700 kkr</b>
<b>ESA Rosetta compensation for delayed launch</b>	<b>475 kkr</b>
<b>Part of FAK budget contributing to joint treatment of atmospheric projects</b>	<b>2 000 kkr</b>
<b>SUM</b>	<b>53 175 kkr</b>

### COSTS

	<b>Grant</b>	<b>Overhead (35%)</b>	<b>Total</b>
<b>Basic funding of research groups</b>			
Project grants decided 2 years ago	550	193	743
Project grants decided 1 year ago	6 246	2 186	8 432
Proposed new project grants	26 573	9 301	35 874
<b>Sum:</b>	<b>33 369</b>	<b>11 679</b>	<b>45 048</b>
<b>Associated costs</b>			
Odin operations (SSC)	3 000	0	3 000
Magic rocket	300	0	300
Management support at SSC for HIFI (124/02)	300	0	300
Programme support (SSC)	300	0	300
Reserve (at disposal of SRAC secretary)	300	0	300
<b>Sum:</b>	<b>4 200</b>	<b>0</b>	<b>4 200</b>
<b>Additional allocation</b>			
Allocation for instruments and technology	3 927	0	3 927
<b>Sum:</b>	<b>3 927</b>	<b>0</b>	<b>3 927</b>
<b>SUM (kkr):</b>			<b>53 175</b>

## Funding of Individual Research Groups

(All figures below are given excluding overhead)

### Space Physics

Principal applicant	Dnr	Project title	Grant 2004
André Mats	109/03	Research in Space Plasma Physics	2 889
Barabash Stanislav	108/03	Plasma physics of the solar system	2 916
Buchert Stephen	113/03	Magnetospheric Physics using Cluster, ILWS Missions and Ground-Based Instrument	464
Lundstedt Henrik	112/03	Solar activity and space weather	210
Lundin Rickard	107/03	Terrestrial magnetospheric Physics	1 767
Marklund Göran	85/03	Research in Space Plasma Physics	2 773

### Atmospheric Physics (joint support from SRAC and FAK)

Principal applicant	Dnr	Project title	Grant 2004
Gumbel Jörg	42/03	Odin PhD position	360
Elgered Gunnar	119/02	Tomography methods for high resolution atmospheric water vapour measurements using GPS	593
Kirkwood Sheila	38/03	Odin PhD position	407
Källén	147/01	Variational assimilation of wind profiles in the tropics for the ESA Earth Explorer Atmospheric Dynamics Mission (ADM/Aeolus)	280
Murtagh Donal	136/03	Global Environmental Measurements	1 495
Stegman Jacek	123/03	Studies of the Middle Atmosphere	1 935

## Astronomy

<b>Principal applicant</b>	<b>Dnr</b>	<b>Project title</b>	<b>Grant 2004</b>
Belitsky Viktor	73/02	FIRST HIFI Beam Measurement Range	<b>1 700</b>
Bergvall Nils	121/03	Galaxy formation and evolution	<b>105</b>
Carlson Per	80/03	Astroparticle Physics in Space	<b>630</b>
Fransson Claes	107/01	Supernovae	<b>270</b>
Goobar Ariel	72/02	The Nature of Dark Energy and Dark matter: satellite observations of high-z supernovae	<b>260</b>
Hjalmarson Åke	88/03	Odin - Astronomy	<b>1 662</b>
Johansson Sveneric	87/03	Participation in space observations and evaluation of data from HST	<b>415</b>
Kuzmin Leonid	82/03	Imaging Arrays of Hot-Electron Nanobolometers for Terahertz Applications	<b>260</b>
Lagerkvist, C.-I.	120/03	Studies of Mercury and the BepiColombo Mission	<b>585</b>
Larsson Stefan	115/03	High Energy Astrophysics	<b>690</b>
Lindgren Lennart	92/03	Astrophysical space using Hipparcos and GAIA	<b>882</b>
Liseau René	39/03	Odin PhD position	<b>360</b>
Merkel Harald	124/02	Hot Electron Bolometric Mixers for the HERSCHEL payload	<b>1 750</b>
Olberg Michael	41/03	Odin PhD Position (plus HIFI-ICC)	<b>455</b>
Olofsson Hans	114/03	Red giant mass loss, and its effect on stellar and galactic evolution	<b>165</b>
Olofsson Göran	116/03	Experimental space research for studying star formation and the interstellar medium	<b>2 585</b>
Pearce Mark	81/03	A Cosmic Ray Balloon Experiment Program for Esrange	<b>110</b>
Rickman Hans	64/02	Studies of Small Bodies in the Solar System	<b>658</b>
Östlin Göran	112/02	Galaxy Evolution/HST	<b>375</b>

## Exobiology

Principal applicant	Dnr	Project title	Grant 2004
Bengtsson Stefan	126/02	Microanalyses of microfossils on Earth - Preparation for ancient Earth studies and for sample return from Mars	370
Holm Nils	70/03	Synthesis and characterisation of peptides encoded by self-assembled monolayers on nucleic acid bases adsorbed on mineral surfaces: Relevance to pre-RNA information processing and the origins of life	621

## Physiology

Principal applicant	Dnr	Project title	Grant 2004
Linnarsson Dag	128/03	Pulmonary and cardiovascular effects of gravity and weightlessness	948
Tesch Per	138/03	A resistive exercise paradigm for use in space	1040*

## Material Sciences

Principal applicant	Dnr	Project title	Grant 2004
Carlberg Torbjörn	86/02	Crystal Growth during Microgravity	540
Kronberg Bengt	119/03	Development of advanced foams under microgravity - metal foams	199
Kronberg Bengt	118/03	Investigation of foaming in non-aqueous systems under microgravity conditions	425
Seetharaman Seshadri	106/02	Thermophysical Properties of Silicate Melts	488*

## Space Technology and other topics

Principal applicant	Dnr	Project title	Grant 2004
Brenning Nils	93/01	Diagnostic and modelling in the VASIMR plasma rocketed prototype	260
Fuglesang Christer	76/02	DESIRE	415*

\* Not taken from the SRAC budget