

German eROSITA Consortium Policy

Approved by Steering Committee, 24/7/2012. Edited by Andrea Merloni

0. Preamble

This document summarizes and defines the management structure and basic rules of conduct of the German eROSITA Consortium (hereafter eROSITA_DE), including regulation of access to the 50% portion of eROSITA data whose proprietary rights lies with the Max Planck Institute for Extraterrestrial Physics (MPE).

eROSITA_DE is the Consortium responsible for the definition, management, planning, implementation, operation and scientific exploitation of the eROSITA telescope. The purpose of this document is to guarantee a most effective, fair and transparent working environment for all members of the Consortium laboring towards the common goal of a successful technical implementation and scientific exploitation of the eROSITA telescope onboard the Spektrum-RG mission.

This should be considered a working document, which may be revised as required by future developments. Revisions to the eROSITA_DE Consortium Policy will be approved by the Principal Investigator (PI), based on the recommendation of the Steering Committee. Notwithstanding the opinion of the Steering Committee and the contents of this document, the PI's decision on matters of eROSITA policy shall be final.

1. Management Structure

1.1 Principal Investigator (PI)

The Principal Investigator is appointed by the Director of High Energy Astrophysics group at MPE, in consultation with DLR, to act as the lead scientist of the eROSITA project.

The PI takes ultimate responsibility for the completion and successful operation of the project and for reporting to external bodies (e.g. DLR, MPG). The PI oversees the implementation of the rules of collaboration within the eROSITA_DE Consortium.

The PI may:

- Appoint the eROSITA Project Scientist;
- Appoint the members of the Steering Committee, and act as its Chair;
- Accept new members into the Consortium;
- Terminate the membership of scientists who are deemed not to have acted in a manner consistent with this document, or otherwise undertaken actions detrimental to the project;
- Sign Memoranda of Understanding (MoU) with third parties who wish to collaborate with the eROSITA_DE Consortium for the scientific exploitation of the eROSITA data;
- Review the effectiveness of the Consortium regulations, and modify them as necessary, in consultation with the Steering Committee.

1.2 The Steering Committee (StC)

The Steering Committee provides recommendations to the Principal Investigator on matters of eROSITA policy. These include, for example, ratification or expulsion of members of the consortium, resolution of conflicts within the consortium, negotiations with partners at project level, etc.

The StC also advises and assists the PI as required in all aspects of the management of the project, including negotiations with DLR.

The StC meets as required (in person or by telecon/videocon), but at minimum twice per year. StC meetings will generally be convened by the PI, but can also be called by request of two or more StC members.

Ideally, the Steering Committee makes decisions by consensus. If the StC fails to reach consensus, the ultimate decision will be made by the PI.

The StC is appointed by the PI, and consists ordinarily of the PI, the PS, the Director of the MPE High Energy Group, the eROSITA Program Manager of each of the Core Institutes, the DLR officer responsible for eROSITA, plus such other individuals as the PI deems appropriate.

1.3 The Project Scientist (PS)

The PS is appointed by the PI in order to coordinate the scientific activities of the eROSITA_DE Consortium and ensure the maximal scientific return from eROSITA.

The PS oversees the scientific production of the eROSITA_DE Consortium, and is responsible for the management and effective operation of the Working Groups (see section 2.4 below). The PS will appoint the WG chairs, in consultation with the PI.

The PS will be responsible for maintaining up to date a common, electronic, WWW-based archive of all submitted and proposed publications making use of eROSITA_DE data and preparatory works, as well as that of eROSITA-related presentations (see section 3.2 below).

The PS will also be responsible to oversee the process of evaluation and acceptance of proposals for external collaborations (see Section 2.4), as well as to help the StC in the annual review of the eROSITA_DE membership list.

The PI, PS and the list of StC members can be found in APPENDIX A.

1.4 Working Groups and their Chairpersons

A “Working Group” (WG) is a team of scientific experts in a particular field (object classes, science tasks, etc.), which organizes and coordinates the work in this field. The goal is to have a streamlined and efficient way to exploit eROSITA scientific potential.

Access to eROSITA_DE proprietary data products (see Section 3.1) is coordinated through the relevant Working Group(s), within the constraints of data rights policy outlined in this document.

WGs are responsible with identifying, approving and coordinating scientific publications that make use of eROSITA_DE proprietary data (see Section 3.3 below).

Overall coordination of the WGs will be provided by the PS, who will appoint the Chairs of the WGs in consultation with the PI.

Chairs of the WGs will take responsibility for calling meetings and/or telecons at such intervals, as they deem necessary for the successful operation of the WG, and will make sure that the minutes of WG telecons and meetings are made available (e.g on the eROSITA wiki) to the eROSITA_DE collaboration.

The Chairs will act as the contact point between the WG and the PS, and provide recommendations for new WG members. All changes in WG membership shall nonetheless be reviewed and approved by the StC and the PI on a yearly timescale.

Chairs of the WGs shall be Senior Scientists of the eROSITA collaboration.

Working Groups may organize into subgroups, as required.

Senior Scientists of the eROSITA_DE Consortium (as defined in section 2.2 below) have the right to join any eROSITA WG. As a rule, Member Scientists shall be able to join at most one scientific and one infrastructure working group. It is, however, understood that WG membership is intended only for those individuals actively working on that specific science topic and/or technical task. The activity level of WG members shall be reviewed periodically by the WG chair, and cases of inactivity reported to the PS; such an action may lead to termination of membership (see section 2.2 below).

The current list of the eROSITA_DE Working Groups can be found in APPENDIX B.

2. Participation in the eROSITA_DE Consortium

2.1 Participating Institutes

2.1.a LEAD INSTITUTE

The lead Institute for eROSITA is the Max Planck Institute for Extraterrestrial Physics. The lead institute provides the PI and PS, the project management, and coordinates the activities of the other participating Institutes with respect to instrument development (hardware and software).

2.1.b CORE INSTITUTES:

The following Institutes, listed in the original eROSITA proposal, and recipients of DLR funds allocated for developing, building, testing all necessary hardware, software and infrastructure needed for the eROSITA telescope, are the “Core Institutes” of the eROSITA_DE Consortium:

- *Dr.-Remeis Sternwarte Bamberg - Erlangen Centre for Astroparticle Physics (ECAP)*
- *Hamburger Sternwarte, Universität Hamburg (UH)*
- *Institut für Astronomie und Astrophysik Tübingen (IAAT)*
- *Leibniz-Institut für Astrophysik Potsdam (AIP)*

The eROSITA Program Managers at Core Institutes shall be representatives of their institutes on the Steering Committee (see section 1.2). They have the responsibility for the delivery of hardware, software or other products as agreed and required by the project and the PI.

2.1.c ASSOCIATED INSTITUTES:

The following institutes are “Associated Institutes” within the collaboration:

- *Argelander-Institut für Astronomie and University of Bonn*
- *Max-Planck Institut für Astrophysik (MPA)*
- *Universitäts-Sternwarte München (LMU)*

They have the right and duty to cooperate with the Core Institutes in pre- and post-launch activities of the eROSITA_DE Consortium.

2.2 Consortium Membership

The eROSITA_DE consortium comprises the StC, the project team, and the members of the Working Groups, whether they be Senior Scientists or Member Scientists (see below). The eROSITA_DE Consortium membership list will be revised by the StC once per year. During such revisions the StC can remove from the official members list inactive scientists (i.e. those, for example, that fail to participate to the Working Groups activities, telecons, meetings, etc.).

The current list of eROSITA_DE Consortium members can be found in APPENDIX C. The PS is responsible for keeping up to date the list of Consortium Members; changes to such a list do not constitute a formal modification of this policy document.

There are two kinds of memberships for the eROSITA_DE Consortium WGs:

a) Senior Scientists:

Senior Scientists of the eROSITA_DE Consortium are scientists who spend a substantial amount of their time actively working for the definition, implementation, operation and scientific exploitation of eROSITA. Senior Scientists are initially identified and appointed by the StC and PI. Proposals for new Senior memberships must be presented formally to the StC and be sponsored at least one member of the StC and at least one WG chair.

Senior Scientists:

- *Share the scientific leadership of the Consortium.*
- *Join and participate in the WGs.*
- *Enjoy access to eROSITA_DE validated data products, and the right to work on those data in an unrestricted manner.*
- *Propose and lead to completion scientific projects that make us of eROSITA_DE proprietary data, and publish the results in a manner consistent with the publication policy.*
- *Propose junior scientists (Ph.D students or postdocs) working under their direct supervision for appointment to the WGs, who can then also access the eROSITA data and lead papers. Responsibility for the proper conduct of these scientists lies with the Senior Scientists.*
- *Promote eROSITA and its science outside the consortium.*
- *Strive to bring resources (e.g. data, equipment, funding, personnel) into the consortium, which further the scientific aims of eROSITA.*
- *Assist the PI, PS or StC with project-related matters when called upon to do so.*

b) Member Scientists:

Scientists whose first affiliation is one of the *Participating Institutes* of the eROSITA_DE Consortium (as listed in Section 2.1 above) may be proposed by

a Senior Scientist as Member Scientists of the eROSITA_DE Consortium. External scientists with skills or data deemed valuable to the project may also be invited by the PI in consultation with the relevant WG chair (or upon proposal by a Senior Consortium Scientist) to join the Consortium as Member Scientists.

Member Scientists:

- *Join and participate in the WGs.*
- *Propose projects to the WG and enjoy access to eROSITA_DE validated data products for those projects.*
- *Lead to completion those scientific projects and publish the results in a manner consistent with the publication policy.*
- *Submit an annual activity report to the PS and the relevant WG chair, describing their eROSITA-related activities for the past year, and plans for the next year.*

The rights and interests of Member Scientists within the collaboration shall be subordinate to that of Senior Scientists.

2.3 General rights and responsibilities of eROSITA_DE Consortium Members

Members of the eROSITA_DE Consortium are expected to comply with the rules of scientific conduct set up in this document. Any infringement of such rules, or other misconduct, may lead to cancelation of the eROSITA_DE Consortium membership, upon deliberation of the Principal Investigator, who will consult with the StC on those matters.

eROSITA_DE Consortium members are able to access and publish eROSITA proprietary data. In addition, eROSITA_DE Consortium members will:

- have access to the eROSITA_DE restricted access web-pages (wiki pages, etc.);
- have access to the Publications Archive (see Section 3.2 below);
- be invited to eROSITA_DE Consortium meetings;
- have access to eROSITA simulated data;
- be authorized to make known their membership in the eROSITA_DE Consortium in any funding and/or research proposal;
- promote eROSITA and its science to the outside world;
- protect the integrity of the eROSITA data and, specifically, neither grant or permit access to those data to unauthorized individuals;
- inform the relevant WG or WGs about their eROSITA-related scientific activities;
- comply with the rules of conduct set up in this document, including the publication policy. Any infringement of these rules, or other misconduct, may lead to expulsion from the collaboration based on the deliberation of the PI;
- announce any PhD thesis that make use of eROSITA_DE proprietary data, as well as any eROSITA preparatory work, to the WG Consortium in sufficient time to ensure adequate protection for the time period of the PhD;

- make proper acknowledgment and appropriate references to the eROSITA_DE Consortium in scientific papers, presentations, technical notes web sites and other publications.
- Members of the eROSITA_DE Consortium may not participate in research project that make use of proprietary eROSITA data outside the eROSITA_DE collaboration, unless authorized to do so by the PI.

Membership of the eROSITA_DE Consortium will, under normal circumstances, terminate if a member moves away from a participating institute (External Collaborators of the Consortium, see below, will be exempted from this rule). Ex-consortium members will be permitted to finish work that has been started while at a Consortium institute, within reason. Members leaving the Consortium, who have made an exceptional contribution to the eROSITA project during their time at a Consortium institution, or with unique expertise, may be considered for continued membership based on a written justification submitted to the StC via the relevant WG Chair.

2.4 External Participants

External participants are not members of the eROSITA_DE Consortium, but may none the less access and work on eROSITA data in collaboration with Consortium Members. External participation may take two forms:

a) Individual External Collaborators (IEC):

Individual External Collaborators are individual scientists, who are not Consortium members, who may be permitted to work on eROSITA_DE proprietary data products and/or contribute to the pre-launch scientific activities for a limited amount of time, upon submission of a specific proposal, including a project timetable, in collaboration with one or more Consortium members.

The proposal should be presented by an existing Consortium member and evaluated by the Working Group, with the aid of the Project Scientist. The rights and scientific interests of External Collaborators shall be subordinate to those of Consortium members. Consortium members will be permitted to join the external collaboration project and become an author of any consequent publications should their contribution merit authorship, consistent with the publication policy. External collaborations will be time-limited. Failure to execute the project on the agreed timetable may result in cancellation of the external collaboration.

IEC will also have to submit a yearly report to the PS and the relevant WG chair(s) of their activities related to the use of eROSITA_DE proprietary data. Like for the case of regular Consortium Members, the status of External Collaborator will be revised by the StC once per year.

b) Group External Collaborators:

Members of large collaborations with broad synergies with eROSITA (e.g. very wide area follow-up etc.) may gain access to the proprietary

eROSITA_DE data products for joint projects via Group External Collaborations, in return for access to proprietary data from the complementary survey.

External Group Collaborations should be regulated by a MoU between the eROSITA_DE project and the external project.

The PI is responsible for carrying out negotiations, or appoint Consortium Members to aid him in this task, and ultimately sign the necessary MoU between the eROSITA_DE and any other scientific consortium/collaboration.

A typical working model would grant some or all of the members of the external collaboration rights similar to that of a Member Scientist, but without joining the WGs, and with the stipulation that all proposed projects must utilize the external project dataset as a key element of the research. eROSITA_DE would have complementary rights to propose similar joint projects. A collaboration committee will be established to review and approve joint project proposals and resolve conflicts. Any MoU should establish clearly the rights and obligations of the collaborating teams once the data from either side are published or become public.

3. eROSITA_DE data rights and publication policy

3.1 Data Rights

According to the detailed agreement between the German and Russian Space agencies (DLR and Roskosmos, respectively) the right of access and scientific exploitation of 50% of the eROSITA data during its proprietary period lies with MPE.

MPE takes responsibility to provide validated data products (e.g. event files) to the eROSITA_DE Consortium during the proprietary period.

Access to raw (non-validated, telemetry) data is *not* automatically granted to all Consortium members, but can be granted by the PI to any member of the Consortium upon specific request, if this is deemed useful for the advancement of the project.

Senior Scientists of the eROSITA_DE Consortium shall have unrestricted access to and use of the eROSITA_DE validated data products, for uses that are compliant to the set of rules described in this document.

Member Scientists of the eROSITA_DE Consortium shall have access to eROSITA_DE validated data products, for specific uses that are authorized by the Working Group.

All Consortium members must comply with the eROSITA publication policy when disseminating eROSITA data in journals, conference papers, press releases or other literature, and in talks and presentations, or web sites.

External collaborators, either individuals or members of collaborating groups, shall have access only to those data that are necessary for the completion of the single project they are actively working on, and based on which their membership proposal was originally accepted, for the limited time necessary to complete that project.

3.2 Software distribution and access

All project-funded software developed for the reduction, calibration and validation of eROSITA data as part of the eROSITA SASS (Science Analysis Software System) will be available to all members of the collaboration as soon as it is verified. Regular updates and upgrades will be announced and distributed to all the Consortium members.

3.3 Publication policy

Unless specified otherwise, the rules contained in this document apply to all publications based on eROSITA_DE proprietary data, as well as on data taken with the eROSITA telescope during commissioning periods. This includes: papers submitted to electronic archives and refereed journals; scientific or technical books or book sections; graphical or tabular materials or discussions of results, in electronic or hardcopy form, that are based on the analysis of eROSITA_DE proprietary data and are generally accessible to non-eROSITA_DE Consortium Members.

3.3.1 Publication Coordination

All Scientific and Technical publications need to be approved by the relevant Working Group (or Working Groups) before submission to the Publications Archive (see below). Each WG can choose the preferred method used to reach agreement on publications approval.

Working Groups should not unreasonably withhold permission for a publication, but should check for conflicts and/or overlaps between groups working on the same or similar topics. Conflicts arising between working groups should be resolved by the chairpersons of the conflicting groups if possible, or, if not, ultimately by the Steering Committee and/or the PI.

The PS will ensure that publications follow the publication process outlined in section 3.3.3 below. To aid in this process, the PS will maintain a common electronic WWW-based archive of all scientific and technical publications of the eROSITA_DE Consortium. This archive shall be accessible to the members of the eROSITA_DE Consortium only.

3.3.2 Authorship

Co-author lists of scientific and technical papers are up to the project-leader (usually the first author of the paper). It is understood that any scientific paper will include in

its authors list any individual who has contributed to the scientific analysis presented.

In addition, any member of the eROSITA_DE Consortium who has access to the Publications Archive may, at any stage of a research project, request that her/his name be added to the list of authors, with the presumption that permission will be granted if she or he has made any significant contribution to the specific research project.

Anyone who has been placed on a paper's author list may make a request to the paper's team that her or his name be removed from the paper, and it shall be removed.

Any conflict regarding the co-authorship of scientific and technical papers should be resolved by the chairperson(s) of the relevant Working Group(s).

3.3.3 Publication procedure

a) Scientific and Technical Papers:

As soon as a project that may lead to a publication has been identified and approved by a WG, the team of scientists carrying out the project should identify a project leader (usually the prospective first author of the proposed paper), who must then submit to the Publications Archive a project title, a list of current project members, and a brief abstract of the intended project.

When a draft of the paper is ready, it should be posted to the Publications Archive as a "pending" paper, indicating the journal to which the paper will be submitted. eROSITA_DE Consortium Members have then **three** weeks to read the pending paper, make comments, request co-authorship, etc. During this period, the PS should also check that the authorship, list of references and acknowledgements fairly represent the contributions made to the publication.

The authors revise the paper according to the comments and suggestions of the Consortium. At the end of the three weeks period, or at the end of the revision process (whichever is longer), the final version of the paper can be submitted to a journal and posted to the Publications Archive. As a rule, papers in refereed journals should be posted on the arXiv only upon acceptance by the journal.

As soon as the paper has been submitted to a journal, the leading scientist should upload it to the Publications Archive as "submitted". Nonetheless, the paper is not considered public (and the results it contains cannot be disseminated outside the eROSITA_DE Consortium) until the project leader for that paper agrees it to be so by flagging it as "public" in the Publications Archive.

b) Key eROSITA papers:

Those papers that require a larger team effort and/or address key scientific questions that drive the eROSITA design (e.g. catalogs, major cosmology papers, etc.) will be classified as key papers. The PI, upon consultation with the Steering Committee and the WG chairs, reserves the right to identify those key papers at the appropriate moment in time, and in any case early enough before substantial amount of work has been made towards the completion of paper, as well as decide the authorship list thereof.

c) Colloquia, Conference Presentations and Conference proceedings

All oral or display presentations that make use of eROSITA_DE proprietary data, as well as technical notes, simulations, commissioning data and pre-launch activity reports, should be published as internal documents on internal web-pages (wiki, etc.) directly accessible to Consortium Members only.

In oral or display presentations, colloquium or conference speakers and presenters may, upon consultation with the PI and the PS, make use of unpublished eROSITA_DE results, provided they are authorized to do so by the leading author of a pending or submitted paper. This policy also covers digital presentation slides published on conference websites soon after speakers have delivered their presentations. In such cases, only material presented in public can be posted to conference websites (i.e. extra slides not shown in public and containing unpublished results must be removed).

d) Theses

All theses for which eROSITA_DE data play an essential role must be announced to the Consortium (see Section 2.3 above). It is a responsibility of the PS and of the relevant WG chair(s) to ensure adequate protection of the scientific projects, which are part of a PhD thesis.

e) Time-critical information

eROSITA will detect time-variable events and/or objects for which timely dissemination to the broader astronomical community will pay big scientific dividends. Any time-critical event detected within the eROSITA_DE data will be reported to the collaboration as a whole, and to the broader community through IAU Circulars and the like. Relevant finding charts, positions, and photometry drawn from the eROSITA data set can be released. Publication of time-critical results can also request to the PI and PS for a shorter review period, if the scientific dividends are high. Such cases will be dealt with on a case-by-case basis by the PI and PS.

Participants who wish to regularly release substantial amounts of time-critical data, must request approval from the PI. Upon approval, the project must be posted to the Publications Archive under the category of "On-line Catalog". At this point the project falls under the rules governing Scientific Publications (three week posting period, authorship rules).

APPENDIX A: eROSITA_DE Management

Principal Investigator: Peter Predehl

Project Scientist: Andrea Merloni

Steering Committee:

- Chair: Peter Predehl (MPE, eROSITA PI)
- Axel Schwobe (AIP)
- Jürgen Schmitt (UH)
- Andrea Santangelo (IAAT)
- Jörn Wilms (ECAP)
- Andrea Merloni (MPE, Project Scientist)
- Kirpal Nandra (MPE, Head of High Energy Group)
- Hartmut Scheuerle (DLR, ex officio)

APPENDIX B: Working Groups and Chairs

List of eROSITA_DE Working Groups and their respective Chairpersons (and co-chairpersons).

a) Science Groups (and chairpersons):

- Solar System (K. Dennerl, MPE)
- Stars (J. Schmitt; J. Robrade (deputy), Hamburg)
- Galactic Compact Objects (A. Schwobe, AIP; A. Santangelo, Tübingen)
- SNR, ISM, Diffuse Galactic Background (W. Becker; M. Freyberg, MPE; M. Sasaki, Tübingen)
- Normal (non-active) Galaxies (F. Haberl, MPE)
- AGN (K. Nandra; M. Brusa (deputy); A. Georgakakis (deputy), MPE)
- Cluster of Galaxies and Cosmology (H. Böhringer, MPE; T. Reiprich, Bonn; J. Mohr, USM)

b) “Infrastructure” Groups (and chairpersons):

- Time Domain Astrophysics (J. Wilms, Bamberg)
- Coordination of multi-wavelength follow-ups (J. Mohr, USM)
- Data analysis, source extraction, catalogs (H. Brunner, MPE)
- Calibration (K. Dennerl, MPE)
- Background (M. Freyberg, MPE)

APPENDIX C: Consortium Members

Provisional Master list of eROSITA_DE Members (24/7/2012). In brackets the WG each member has signed for.

C1: Senior Scientists

Lamer Georg (AIP - glamer@aip.de) [agn,cat,cls]
Schwope Axel (AIP - aschwope@aip.de) [cat,cob,fol] **StC**
Steinmetz Matthias (AIP - msteinmetz@aip.de) []
Reiprich Thomas (Bonn - reiprich@astro.uni-bonn.de) [cat,cls,fol]
Kreykenbohm Ingo (ECAP - Ingo.Kreykenbohm@sternwarte.uni-erlangen.de) [cal,cat,cob,tda]
Wilms Joern (ECAP - joern.wilms@sternwarte.uni-erlangen.de) [cat,cob,tda] **StC**
Robrade Jan (UH - jrobrade@hs.uni-hamburg.de) [cat,str,sol,tda]
Schmitt Juergen (UH - jschmitt@hs.uni-hamburg.de) [str,cat] **StC**
Meidinger Norbert (MPE/HLL - nom@hll.mpg.de) []
Strueder Lothar (MPE/HLL - lts@hll.mpg.de) []
Santangelo Andrea (IAAT - santangelo@astro.uni-tuebingen.de) [cat,cob,gal] **StC**
Sasaki Manami (IAAT - sasaki@astro.uni-tuebingen.de) [cal,cat,cob,gal,snr]
Tenzer Chris (IAAT - tenzer@astro.uni-tuebingen.de) [bkg,cal]
Guenther Hasinger (IfA, Hawaii - hasinger@IfA.Hawaii.Edu) []
Salvato Mara (MPE - mara.salvato@ipp.mpg.de) [agn,fol]
Becker Werner (MPE - web@mpe.mpg.de) [cat,cob,snr,tda]
Boehringer Hans (MPE - hxb@mpe.mpg.de) [agn,cat,cls,fol]
Boller Thomas (MPE - bol@mpe.mpg.de) [agn,bkg,cat,tda]
Brunner Hermann (MPE - hbrunner@mpe.mpg.de) [bkg,cal,cat,cls,fol]
Brusa Marcella (MPE - marcella@mpe.mpg.de) [agn,cat,cls,fol]
Burwitz Vadim (MPE - burwitz@mpe.mpg.de) [cal,cob,sol,str]
Dennerl Konrad (MPE - kod@mpe.mpg.de) [cal,cat,gal,sol]
Freyberg Michael (MPE - mjf@mpe.mpg.de) [bkg,cal,cat,str,snr,sol]
Friedrich Peter (MPE - pfriedrich@mpe.mpg.de) [agn,fol]
Georgakakis Antonis (MPE - age@astro.noa.gr) [agn,cat]
Haberl Frank (MPE - fwh@mpe.mpg.de) [cal,cat,cob,gal,snr]
Lutz Dieter (MPE - lutz@mpe.mpg.de) []
Merloni Andrea (MPE - am@mpe.mpg.de) [agn,cat,cls,fol] **PS, StC**
Nandra Kirpal (MPE - knandra@mpe.mpg.de) [agn,cat,cls,fol] **StC**
Pietsch Wolfgang (MPE - wnp@mpe.mpg.de) [cob,gal,snr]
Predehl Peter (MPE - predehl@mpe.mpg.de) [bkg,cal,cat,cls,snr] **PI, StC**
Trümper Joachim (MPE - jtruemper@mpe.mpg.de) []
Mohr Joseph (USM - jmohr@usm.lmu.de) [cat,cls,fol]

C2: Member Scientists

de Hoon Arjen (AIP - arjen@aip.de) [cls]
de Jong Roloef (AIP - roelof.s.de.jong@gmail.com) [fol]
Henke Harry (AIP - henke@aip.de) [cat]
Kitaura Francisco (AIP - fkitaura@aip.de) [cls]
Pires Adriana (AIP - apires@aip.de) [cob,cal]
Schoenherr Gabriele (AIP - gschoenherr@aip.de) [cob]
Schwarz Robert (AIP - rschwarz@aip.de) [cob]
Takei Ali (AIP - atakey@aip.de) [cls]
Traulsen Iris (AIP - itraulsen@aip.de) [cal,cob,tda]
Bertoldi Frank (Bonn - bertoldi@astro.uni-bonn.de) [cls]
Borm Katharina (Bonn - kborm@astro-uni-bonn.de) [cls]
Erben Thomas (Bonn - terben@astro.uni-bonn.de) [cls]
Irshad Mohammed (Bonn - irshad@astro.uni-bonn.de) [cls]
Kerp Juergen (Bonn - jkerp@astro.uni-bonn.de) [snr]
Lovisari Lorenzo (Bonn - lorenzo@astro.uni-bonn.de) [cls]
Pacaud Florian (Bonn - pacaud@astro.uni-bonn.de) [cat,cls,fol]
Porciani Cristiano (Bonn - porciani@astro.uni-bonn.de) [cls]
Ramos Miriam (Bonn - miriam@astro.uni-bonn.de) [cls]
Ramstedt Sofia (Bonn - sofia@astro.uni-bonn.de) [str]
Schellenberger Gerrit (Bonn - schellen@astro.uni-bonn.de) [cls]
Schneider Peter (Bonn - peter@astro.uni-bonn.de) [cls]
Tauris Thomas (Bonn - tauris@astro.uni-bonn.de) [cob]
Zhang Yu Ying (Bonn - yyzhang@astro.uni-bonn.de) [cls]
Thorsten Brand (thorstenbrand@gmx.net) []
Peter Friedrich (peter.friedrich@physik.stud.uni-erlangen.de) []
Christina Graefe (christina.graefe@gmail.com) []
Duro Refiz (ECAP - refiz.duro@sternwarte.uni-erlangen.de) [cob,tda]
Eikmann Wiebke (ECAP - wiebke_eikmann@web.de) []
Mueller Sebastian (ECAP - sebastian.mueller@sternwarte.uni-erlangen.de) [cob,tda]
Wille Michael (ECAP - Michael.Wille@sternwarte.uni-erlangen.de) [cal,cat,tda]
Grinberg Victoria (ECAP - Victoria.Grinberg@sternwarte.uni-erlangen.de) [tda]
Grossberger Christoph (ECAP - christoph.grossberger@sternwarte.uni-erlangen.de) [cat,tda,sol]
Natalie Hell (ECAP - Natalie.hell@sternwarte.uni-erlangen.de) [tda]
Schmid Christian (ECAP - christian.schmid@sternwarte.uni-erlangen.de) [agn,cal,cat,cls,cob,tda]
Bruggen Marcus (Hamburg - mbrueggen@hs.uni-hamburg.de) [cls]
Doroshenko Rozalya (IAAT - doroshr@astro.uni-tuebingen.de) [cob]
Doroshenko Victor (IAAT - vzzdor@gmail.com) [cob]
Ducci Lorenzo (IAAT - ducci@astro.uni-tuebingen.de) [cob,gal]

Kavanagh Patrick (IAAT - kavanagh@astro.uni-tuebingen.de) [cal,fol,gal,snr,str]
 Kendziorra Eckhard (IAAT - kendziorra@astro.uni-tuebingen.de) [cat]
 Klochkov Dmitry (IAAT - klochkov@astro.uni-tuebingen.de) [cob]
 Nagel Thorsten (IAAT - nagel@astro.uni-tuebingen.de) [cob]
 Perinati Emanuele (IAAT - perinati@astro.uni-tuebingen.de) [cal,cat]
 Piraino Santina (IAAT - piraino@astro.uni-tuebingen.de) [cob]
 Puelhofer Gerd (IAAT - Gerd.Puehlhofer@astro.uni-tuebingen.de) [agn,cal,cob,snr]
 Staubert Ruediger (IAAT - staubert@astro.uni-tuebingen.de) [cob]
 Suleimanov Valery (IAAT - suleimanov@astro.uni-tuebingen.de) [cob]
 Vasco Davide (IAAT - vasco@astro.uni-tuebingen.de) [cob]
 Warth Gabriele (IAAT - warth@astro.uni-tuebingen.de) [cal,cob,gal,snr]
 Werner Klaus (IAAT - werner@astro.uni-tuebingen.de) [cob]
 Braeuninger Heinrich (MPE - hb@mpe.mpg.de) []
 Buchner Johannes (MPE - jbuchner@mpe.mpg.de) [cat]
 Chon Gayoung (MPE - gchon@mpe.mpg.de) [agn,cat,cls,fol]
 Clerc Nicolas (MPE - nicolas@mpe.mpg.de) [agn,cat,cls]
 Collmar Werner (MPE - wec@mpe.mpg.de) [agn]
 Dwelly Tom (MPE - dwelly@mpe.mpg.de) [cat]
 Eder Josef (MPE - josef.eder@mpe.mpg.de) []
 Fassbender Rene (MPE - rfassben@mpe.mpg.de) [cls]
 Finoguenov Alexis (MPE - alexis@mpe.mpg.de) [cls]
 Fuermetz Maria (MPE - m.fuermetz@mpe.mpg.de) []
 Guglielmetti Fabrizia (MPE - fabrizia@mpe.mpg.de) [cal,cat,cls,fol,snr,sol]
 Hartner Gisela (MPE - gih@mpe.mpg.de) [cal]
 Henze Martin (MPE - mhenze@mpe.mpg.de) [cat,gal]
 Kim Jaiwon (MPE - jkim@mpe.mpg.de) [cat,fol]
 Phleps Stefanie (MPE - sphleps@mpe.mpg.de) [cls]
 Ponti Gabriele (MPE - ponti@mpe.mpg.de) [agn,snr]
 Prinz Tobias (MPE - tprinz@mpe.mpg.de) [cob]
 Rau Arne (MPE - arau@mpe.mpg.de) [agn,cob,tda]
 Saglia Roberto (MPE - saglia@mpe.mpg.de) [cls]
 Strong Andrew (MPE - aws@mpe.mpg.de) [bkg,cat,snr]
 Sturm Richard (MPE - rsturm@mpe.mpg.de) [cat,gal]
 Voges Wolfgang (MPE - wolfgang.voges@mpe.mpg.de) [cat]
 von Kienlin Andreas (MPE - azk@mpe.mpg.de) []
 Bazin Gurvan (USM - gbazin@usm.lmu.de) [cls,fol]
 Dolag Klaus (USM - dolag@usm.uni-muenchen.de) [cls,fol]
 Koppenhoefer Johannes (USM - koppenh@usm.uni-muenchen.de) [fol]
 Liu Jiayi (USM - jiayiliu@usm.uni-muenchen.de) [cls,fol]
 Saro Alex (USM - saro@usm.lmu.de) [cls,fol]

Seiz Stella (USM - stella@usm.uni-muenchen.de) [cls]

Suhada Robert (USM - rsuhada@mpe.mpg.de) [cat,cls]

Weller Jochen (USM - jochen.weller@usm.lmu.de) [cls]

Zenteno Alfredo (USM - alfredo@usm.uni-muenchen.de) [cls]