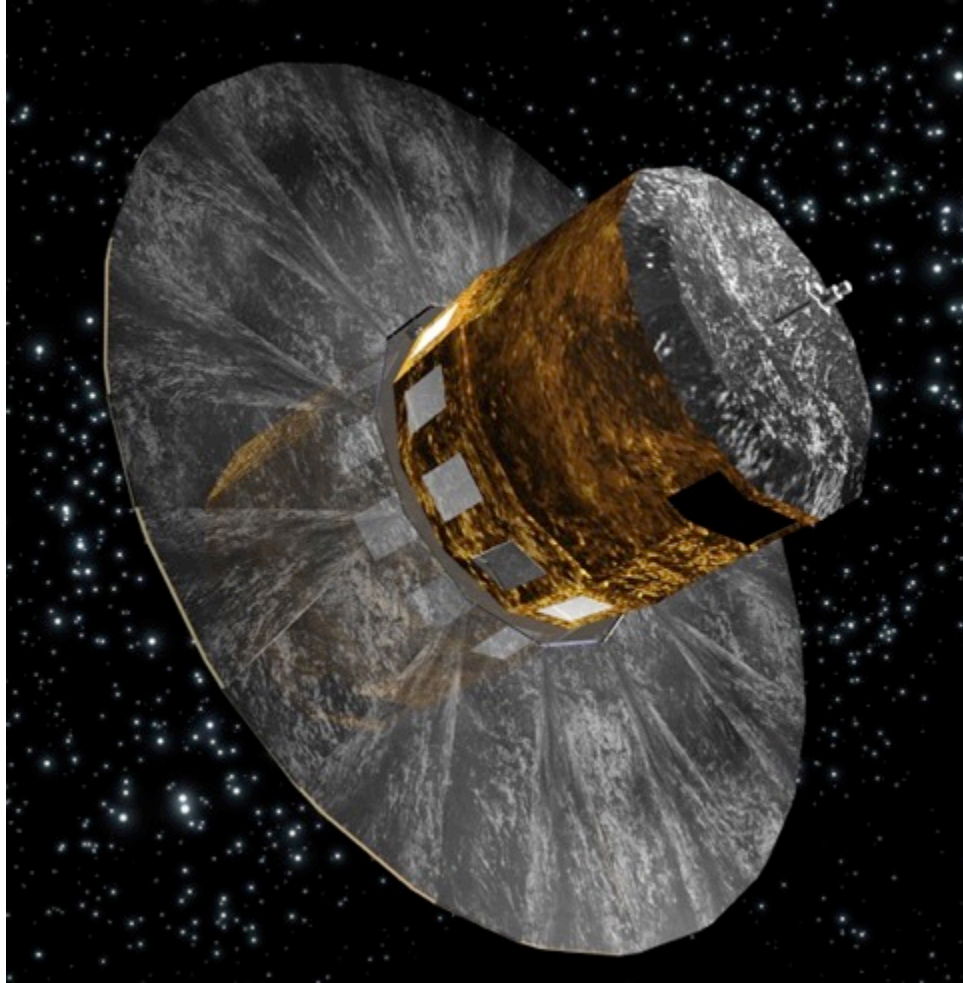


GREAT: Status Updates



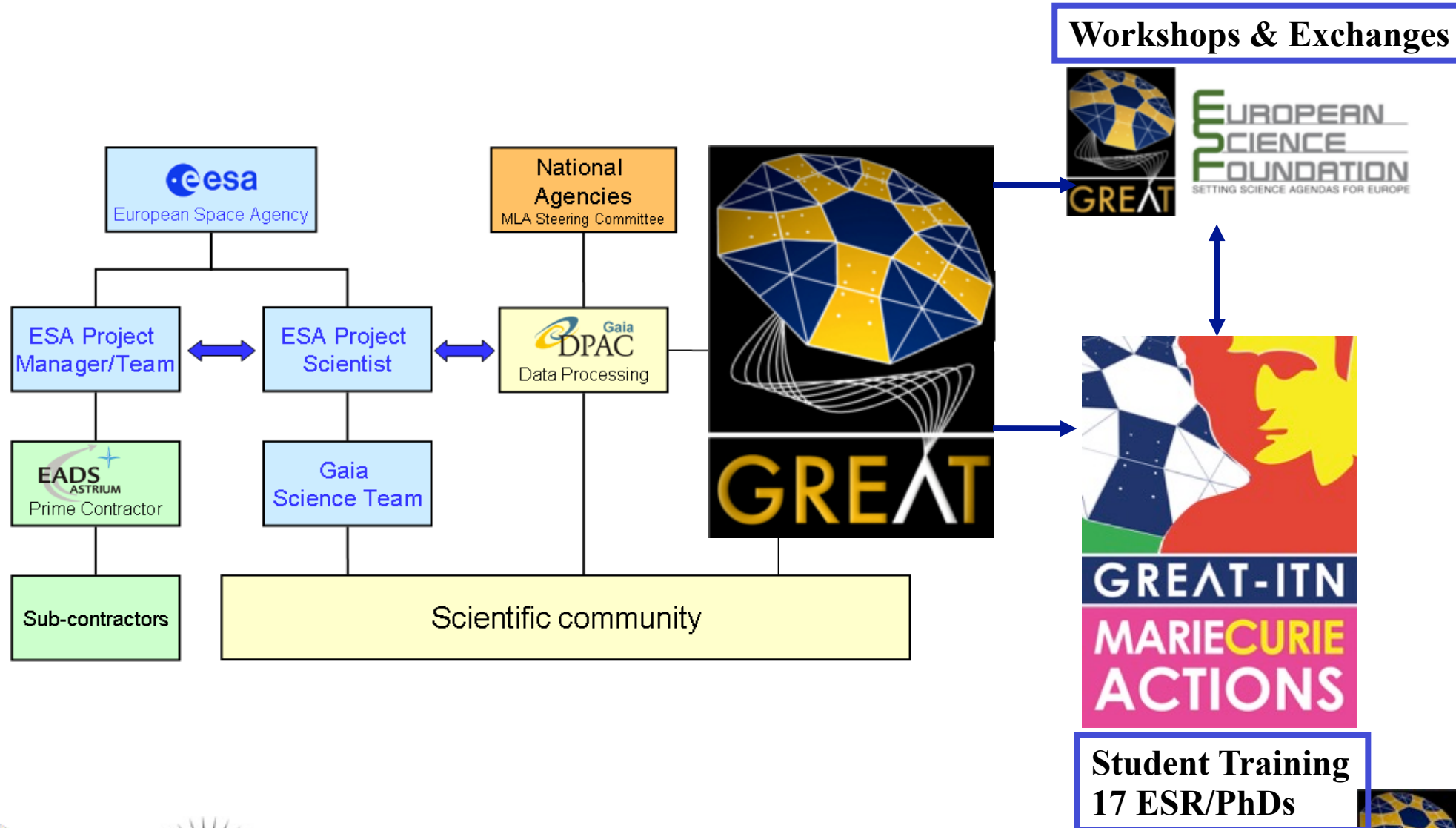
GREAT: Gaia Research for European Astronomy Training

Nicholas Walton
(Institute of Astronomy)

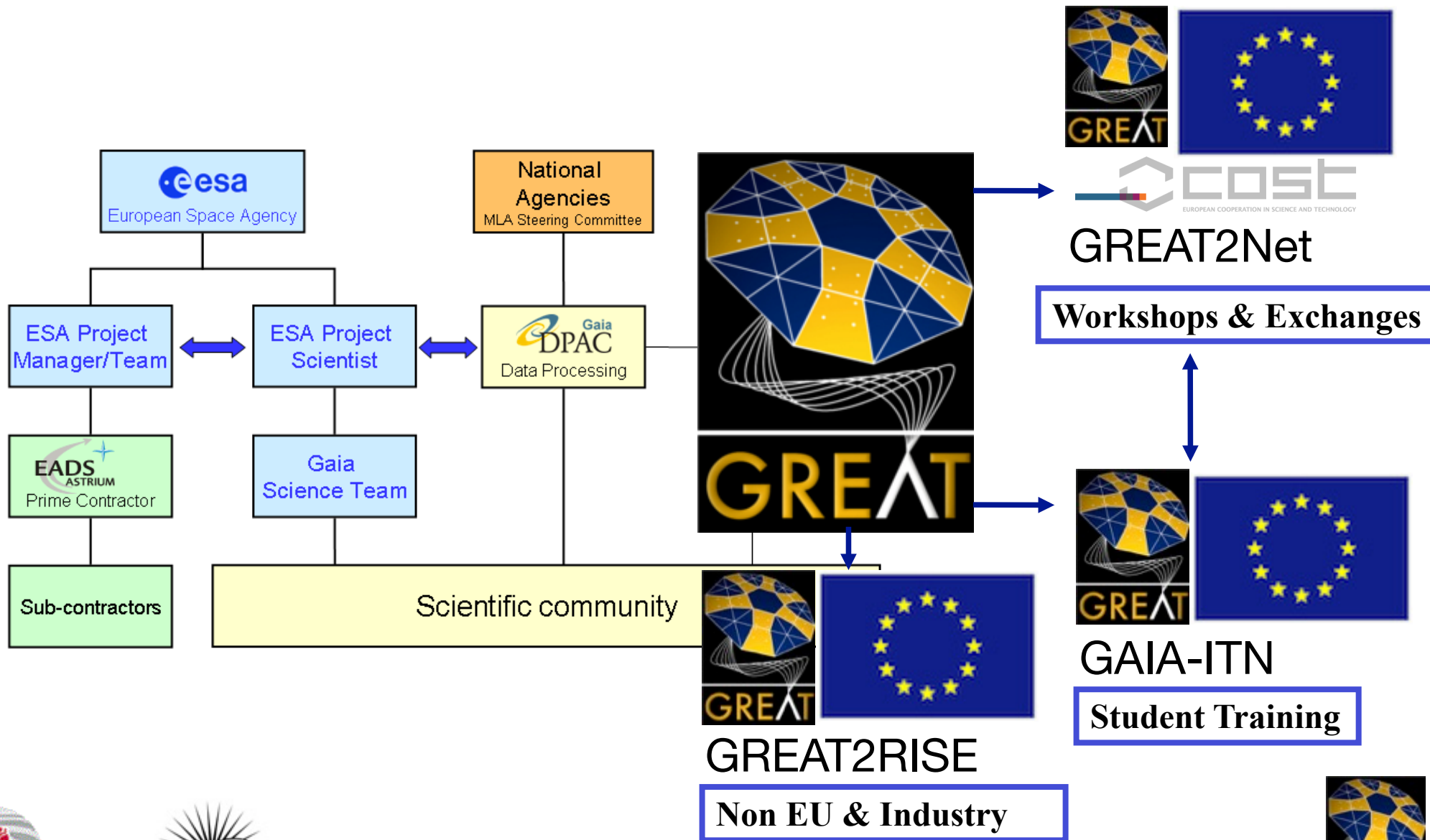


UNIVERSITY OF
CAMBRIDGE

The GREAT Programme: 2010-2015



The GREAT Programme: 2016-2020



GREAT Meetings (2010-2015)

over 2000 scientists attending ~60 events

<http://great.ast.cam.ac.uk/Greatwiki/GaiaScienceMeetings>

See this link also for the final reports from each meeting

Many papers, proceedings, white papers, proposals generated



gaia



8-10 Jul 2015

GREAT@GAGNES 15 - Nic Walton - Paris

4



Key GREAT Meetings in 2014

- Final GREAT-ITN conference, Barcelona, 1-5 Dec 2014
- Successful and interesting conference ([#greatconf14](https://twitter.com/greatconf14))
- Range of science from the network presented together with the latest from Gaia
- Proceedings in the EAS Publication Series (Aug 15)
- <http://gaia.ub.edu/greatconf14>

The Milky Way Unraveled by Gaia
GREAT Science from the Gaia Data Releases



1-5 December 2014
Aula Magna, University of Barcelona
Barcelona, Spain
<http://gaia.ub.edu/greatconf14>

Science Organising Committee
Michaela Walton: Institute of Astronomy, Cambridge, UK (Chair 2014)
Francesca Figuera: Barcelona University, Spain (Chair 2013)
Coryn Butler-Hess: Max Planck Institute for Astronomy, Heidelberg, Germany
Anthony Brown: University of London, The Netherlands
Gaelle Clement: IAGG, Observatoire Astronomique de Bologna, Italy
Sergio Blanco-Cabrera: Université de Bordeaux (CNRS - LAB France 218-esp)
Lorenz Spar: Universität zu Göttingen, Switzerland
Julien Valling: Lund University, Sweden
Eva Lofblad: University of Heidelberg, Germany
Ruxandra: Peking University, East Institute for Astronomy and Astrophysics, Beijing, China
Tadeusz Michalowski: Adam Mickiewicz University, Poznań, Poland
Wojciech Miazka: ESA, ESAC, Madrid, Spain
Sergey Kuznetsov: IAGG, IAGG, Amsterdam, The Netherlands
Joris De Meir: KU Leuven, Belgium
Antoine Robin: Observatoire de Besançon, Institut d'Astronomie, France
Alexandra Laro: KU Leuven, Belgium (2013-esp)
Nuno Santos: Centro de Astronomia, São Paulo, Portugal
Martin Smith: Shanghai Astronomical Observatory, Shanghai, China
Caroline Tardieu: Université de Bordeaux (CNRS - LAB France)
Antonia Vallero: IAGG, Observatoire Astronomique de Padoue, Italy

  <http://www.great-itn.eu>



8-10 Jul 2015

GREAT@GAGNES 15 - Nic Walton - Paris





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Final GREAT ESF Meetings

(since last EWASS 2014)

2015

- **GREAT @ The IAU General Assembly**, 3-7 Aug 2015, Honolulu, USA ( [Assembly website](#)) ([wiki site](#))
- **GREAT-ESF Workshop *Gaia for AGN and Extragalactic Science (GAGNES)***, 8-10 July 2015, Institut d'Astrophysique de Paris, France
- **GREAT-ESF Workshop *Next Steps Towards Future Space Astrometry Missions***, 6-8 July 2015, IIA, Cambridge, UK ([Workshop wiki](#))
- **GREAT PLENARY *8th Great Plenary Meeting***, 22-26 Jun 2015, La Laguna, Spain ( [Plenary website](#)) (([wiki site](#)))
 - The GREAT Plenary will be taking place at the  [European Week of Astronomy](#), as Symposium 3 (30 Jun - 2 Jul 2014).
- **GREAT-ESF Workshop *Massive Stars and the Gaia-ESO Survey***, 5-7 May 2015, Brussels, Belgium ( [Workshop website](#))

2014

<http://great.ast.cam.ac.uk/Greatwiki/GaiaScienceMeetings>

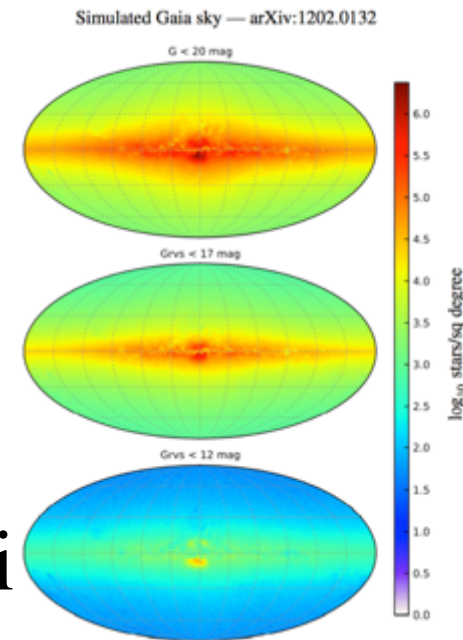
- **GREAT-ITN CONFERENCE *The Milky Way Unravelling by Gaia: GREAT Science from the Gaia Data Releases***, 1-5 December 2014, University of Barcelona, Spain ( [Conference website](#))
- **GREAT-ESF Workshop *Gaia-FUN-SSO-3: Gaia Solar Systems Objects Followup Network Workshop***, 24-26 November 2014, Paris Observatory, France ( [Workshop website](#))
- **GREAT-ESF Workshop *Gaia Viz Workshop***, 9-11 July 2014, Vienna, Austria ( [Workshop website](#))
- **GREAT-ESF Workshop *Solar System Science with Gaia***, 2-4 Jul 2014, Helsinki, Finland ( [Meeting website](#)) (Note: organised as WS2 at ACM2014) ( [Meeting Final Report](#))
- **GREAT-ESF Workshop *Helios and Helium : what is wrong with them ?***, 2-3 Jul 2014, Geneva, Switzerland ( [Meeting website](#)) (Note: organised as Special Session 2 at the EWASS 2014 meeting). ( [Meeting Final Report](#))
- **GREAT PLENARY *7th Great Plenary Meeting***, 30 Jun - 2 Jul 2014, Geneva, Switzerland ( [Plenary website](#)) (([wiki site](#)))
 - The GREAT Plenary will be taking place at the  [European Week of Astronomy](#), as Symposium 3 (30 Jun - 2 Jul 2014).



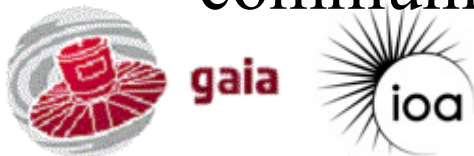
GREAT RNP Activity Highlights

GREAT and Gaia Data Access

- Gaia Data Archive system now under development through DPAC CU9
- GREAT has provided the forum to gather community input to the requirements
 - Key events at GREAT Plenaries
- Requirements captured via the GREAT wiki
 - <http://great.ast.cam.ac.uk/Greatwiki/GaiaDataAccess>
 - Use case collected so far in Brown et al (see http://www.rssd.esa.int/doc_fetch.php?id=3125400)
 - Second round of use scenarios from the community requested – see wiki above



Delivering
the Promise
of Gaia



GREAT RNP Activity Highlights

GREAT Science

- Workshops and networking activities have supported a range of key topics in the science of Gaia
 - Modelling – e.g. Besancon School, Gaia Challenge
 - Spectral Analysis – series of workshops (support to GES)
 - Alerts – Gaia Alerts telescope network established
 - AGN/ ExtraGal – support to GAGNES workshops
- Significant new networks of European scientists have organised effective joint research
 - Supporting wider scientific activity – e.g. spectral analysis required by the surveys, modelling required to interpret Gaia data, alerts bring together observatories to follow-up the alert stream from Gaia, etc



GREAT RNP Activity Highlights

GREAT and Training

- Strong focus of GREAT in providing relevant training to the science community
 - Addressing areas required to scientifically exploit Gaia
- Schools on topics such as ‘AstroStatistics’, ‘Galactic Dynamics’, ‘Observational Techniques’, ‘Distances’: proceedings and online materials providing a legacy
- Beneficial links between the GREAT ESF and ITN programmes have allowed for greater participation from students across Europe.
- Synergies will be exploited with the GREAT2Net, GREAT2Rise and GAIA-ITN network activities involving scientists, students, academe industry
 - Lay ground work for science for Gaia and next steps astrometry



GREAT2Net

extending GREAT in the era of Gaia

- The Gaia/ GREAT community, with the support of the Gaia Science Team & the DPAC Executive will propose a COST networking programme (deadline Sep 2015)
- Programme will focus on scientific preparation and exploitation of the Gaia data over the 4 year period 2016-2019, plus develop European astrometry expertise
 - Support to workshops and research exchange visits
 - Focus on exploitation of Gaia data (first releases summer '16)
- Those interested in participating complete the survey at <http://www.great-esf.eu/participate/Great2Net-EoI-Dec14/>

