Collaboration in Astronomy in the framework of COST

Computational and Information infrastructure in the Astronomical DataGrid

http://www.iAstro.org

Fionn Murtagh, (Action Chair) Queen's University Belfast, UK
Daniel Egret, (Action Vice-Chair) Strasbourg Astronomical Observatory, F
Giuseppe Longo, Univ. Federico II, I
Vito Di Gesu, Univ. Palermo, I
Gabrielle Allen, Albert-Einstein-Institute, Potsdam/Golm, D
Jorge Nunez, University of Barcelona, E
Rafael Molina, University of Granada, E
Ignacio Llorente, Universidad Complutense, E
Andy Shearer, Aaron Golden, Ray Butler, National Univ. of Ireland, Galway, IRL
Andre Holl, Konkoly Observatory, H
Milcho Tsvetkov, SSADC, Space Research Institute, Sofia, BG
David Boyd, Lakshmi Sastry, Rutherford Appleton Laboratory, UK
Valeri Golev, Department of Astronomy, University of Sofia BG
Philippe Jetzer, Inst. Theoretische Physik, Zurich, CH
Andre Csillaghy, Univ Applied Sciences, Windisch, CH

Mission Statement

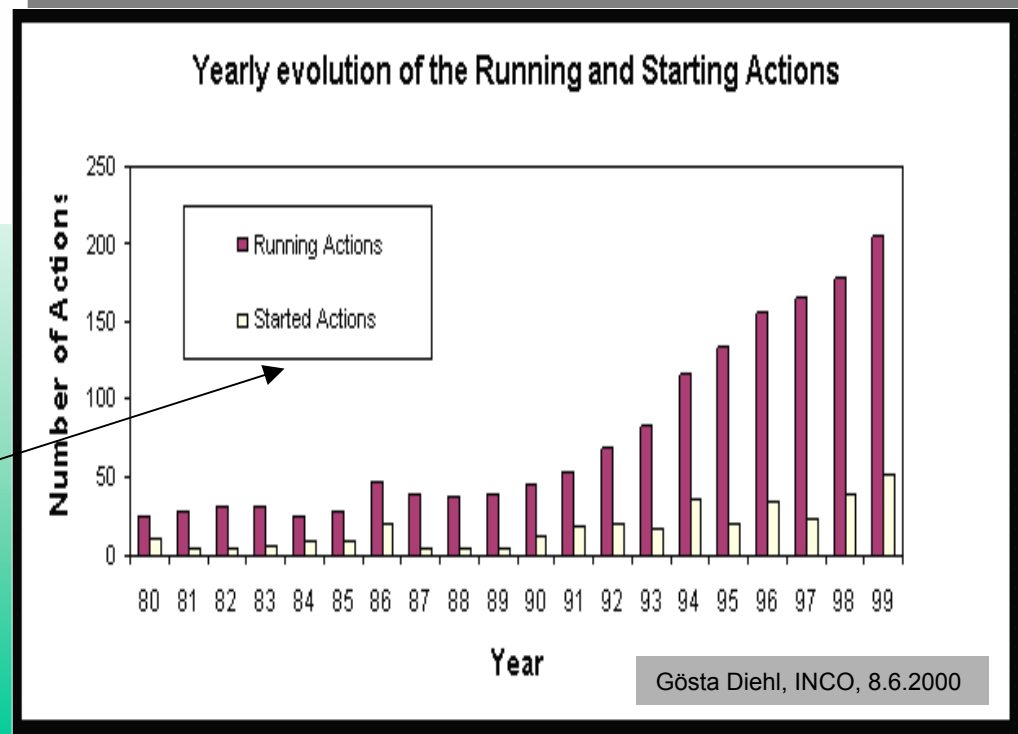
The Grid is the infrastructure of the virtual organization of the future, providing high performance and high added value services relating to computational, data, information and knowledge processing requirements. Those involved in **iAstro** aim at ensuring best application of new theory and tools in the astronomy application domain, and simultaneously Grid-enabling the most appropriate areas of the application domain. The means applied by **iAstro** to achieve these ends are, respectively, further developing and bridging the many ongoing projects (i.e., disseminating exciting theories and good practice in the direction of astronomers), and through selection and bringing Grid-appropriate areas of the application domain into focus (i.e., expressing and focusing application requirements in the direction of computer scientists, and data and information analysts). An additional objective is the spinning out of new national and international projects, where appropriate and needed.

ASTRO_GRID: (или в переводе Решетка или Матрица) это инфраструктура виртуальной организации в будущем обеспечивающая работу высокотехнологических комплексов обслуживания связанных с требованиями вычислительной техники, информации и знание о наличных данных и их обработки. Участники в iAstro надеятса обспечить самые хорошие приложения новых теорий, инструментов и методов в астрономии и одновременно использовать Grid-возможностей в самых подходящих приложных областей. Средства, которые iAstro использует чтобы достичь этих целей, это развитие взаимосвязание идущих проектов (т.е. распространение впечатляющих теорий и соввеменную практику между астрономов) а также через выбор и поставление Grid-подходящих областий (т.е. выражая и фокусируя приложных требований в направлении компютерных специалистов, доступа к данных и информационный анализ).

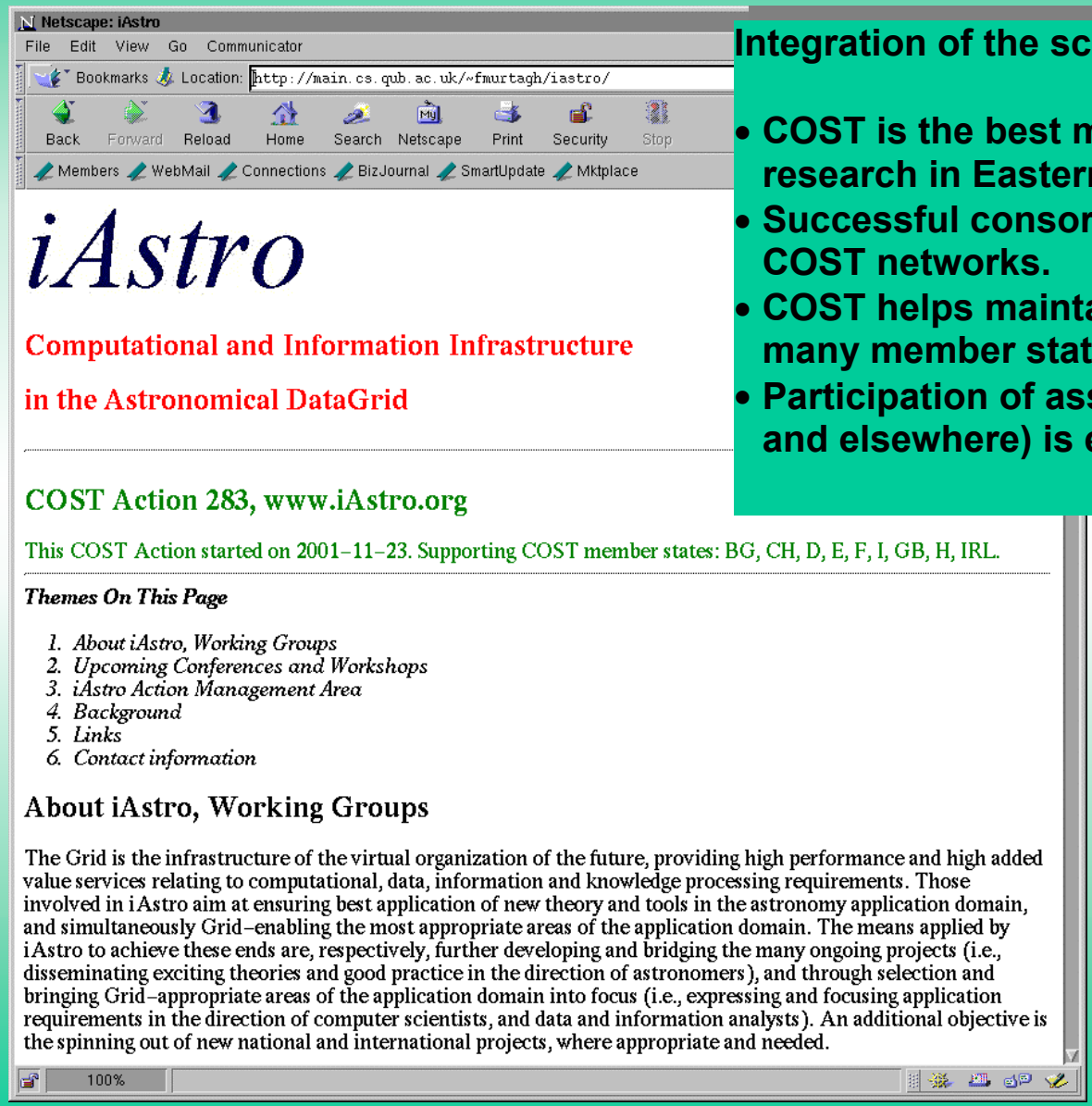
Дополнителная задача это способствоват протекания новых национальных и интернационалных проектов туда где ето нужно и необходимо.

COST Headquarters in Brussels

Development of COST Actions in the period 1980-99
Current number of actions is about 290



iAstro initiative - Action 283: Computational and Information Infrastructure in the Astronomical DataGrid



Integration of the scientific communities of Europe

- **COST is the best mechanism for integrating research in Eastern and Western Europe.**
- **Successful consortia for the FP are formed in the COST networks.**
- **COST helps maintain research capabilities in many member states.**
- **Participation of associate members (in US, Russia, and elsewhere) is encouraged.**

A distribution list is available: iastro@qub.ac.uk (Send message subscribe iastro *address* to mj-admin@qub.ac.uk or to f.murtagh@qub.ac.uk)

iAstro Working Groups

WG1
- Interoperability, data correlation and federation (D Egret)
- Interoperability (D Egret)
- Data quality/correlation/fusion (V Di Gesu)

WG2
- Visualization (G Allen)
- Advanced visual user interfaces for data mining (V Di Gesu)

WG3
- Heterogeneous, multimedia data (R Molina)
- Image/signal restoration (R Molina)
- Data mining (V Di Gesu)

WG4
- Surveys (J Nunez, G Longo and M Tsvetkov)
- Wide field imaging (G Longo, M Tsvetkov)
- Robotic observatories (J Nunez)