Concluding Remarks

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Chair, IVOA Executive Committee





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- Status of Argentina, Brazil, and Australian VO
 - ✓ South America: ramping up!
 - \checkmark Want to publish data in the VO, finding it difficult
 - lack of ONE entry point for data centres on IVOA pages
 - lack of "publishing package"
 - situation should improve with new IVOA Web pages
 - o related to "Large projects and surveys and the IVOA"
 - ✓ Australia: no dedicated VO funding but all new big projects are planning VO compliancy from the start





- Expiring Terms for WG Chairs and vice Chairs
 - \checkmark six WGs + TCG affected
 - ✓ thorough discussion on new names and possible extensions
 - ✓ criteria:
 - expertise!
 - geographical
 - political





- Applications: *Mark Taylor* (Chair), *Enrique Solano* (vice Chair) [effective July 2011]
- Data Model: Jesus Salgado (Chair), Omar Laurino (vice Chair)
- **Grid and Web Services**: *Andreas Wicenec* (Chair), *André Schaaf* (vice Chair)
- Semantics: 1-year extension to current Chair and vice Chair (*Derrier, Gray*)
- **Theory**: 1-year extension to current Chair (*Wozniak*), *Franck Le Petit* (vice Chair)
- **VOEvent**: *Matthew Graham* (Chair)
- **TCG**: 1-year extension to current Chair and vice Chair (*Arviset, Gaudet*)





- Thanks to:
 - ✓ *Tom McGlynn* (Applications)
 - ✓ Mireille Louys (Data Model)
 - ✓ Matthew Graham and Paul Harrison (GWS)
 - ✓ *Claudio Gheller* (Theory)
 - ✓ *Rob Seaman* (VOEvent)
- And a special "Thank you" to *Dave De Young*!





Already many large-area surveys available: e.g., NVSS, FIRST, WENSS (radio); IRAS, 2MASS, DENIS, UKIDSS (IR); SDSS, 2dF (optical); GALEX (UV); ROSAT, XMM (X-ray); EGRET, *Fermi* (gamma-ray).

More to come (an incomplete list!):

- <u>Wide Field Infrared Explorer (WISE)</u>: ~ 500 million near-IR sources, all-sky [now]
- Visible and Infrared Survey Telescope for Astronomy (VISTA): ≈ a few billion near-IR sources, half-sky [now]
- *Low Frequency Array (LOFAR):* ~ 50 million radio sources, halfsky [now]
- Panoramic Survey Telescope and Rapid Response System (PAN-STARRS): ≈ 20 billion optical sources [now]





- <u>*e-Rosita:*</u> ~ 2 million X-ray sources, all-sky [2012]
- <u>Square Kilometre Array (SKA) Pathfinders (EVLA, ASKAP, ATA,</u> <u>Meerkat, Apertif, ...):</u> ≈ 100 million radio sources each (half-sky) [2013 -]
- *Large Synoptic Survey Telescope (LSST):* ≈ 20 billion optical sources [2018?] (catalogue: 300 Terabytes/year x 10)
- <u>SKA:</u> \approx 2 billion (?) radio sources (half-sky) [2020?]

Not yet approved:

- <u>Wide Field X-ray Telescope (WFXT):</u> ~ 10 million X-ray sources, all-sky
- *Euclid:* ~ 10 million near-IR spectra, all-sky





- Large projects and surveys and the IVOA
- IVOA participation mutually beneficial:
 - ✓ projects have their needs/requests/wishes listened to
 - ✓ IVOA gets "real life", practical cases
 - \checkmark IVOA gets feedback on standards
- Is the IVOA doing enough to get all these new projects on board?
- Went through a list of large projects and surveys and assessed situation
- Identified potential contact persons/projects
- Will try to get at least some of these directly involved





- New IVOA Web pages: draft available at <u>http://www.cacr.caltech.edu/~sarah/websites/ivoa/</u>
- Everybody is invited to give comments and feedback (wiki page)





- ESO and the VO:
 - ✓ increasing pressure on ESO budget:
 - expected approval of the European Extremely Large Telscope (E-ELT) construction
 - ramping-up of ALMA operations
 - o continued operation of La Silla/Paranal facilities
 - current economic situation
 - \checkmark activities to be limited to core business
 - \checkmark re-direction of VO resources
- Termination of VO Project at ESO:
 - $\checkmark\,$ ESO out the EuroVO and IVOA at the end of 2011
- ESO remains committed to VO compliancy of its data holdings (from "active" to "passive" VO player)





This meeting

- Very proficuous*
- First ever "VO and outreach" session
- First CSP project (ObsCore) near completion
- Second one (SED builder) getting there (I hope ...)
- Many cross-WG sessions and discussions
- My (personal) feeling:
 - ✓ standards needed for most fundamental needs of astronomical community are *almost* done
 - ✓ next high level goal: get large projects and surveys directly involved in IVOA





- Global economic situation still "not easy"
- IVOA has gone through some tough times but new members (and more likely to come)
- Current and especially future large surveys need interoperability: "VO publishing" should be made as easy as possible (new IVOA members as "test cases")
- Very important to stay focused and tuned to the needs of the astronomical community at large (researchers and projects)





Next Interop

Pune, India, October 17 – 21, 2011





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2012 Interops

• May 2012: USA (location still TBD)

• October/November 2012: Brazil (a beach close to São Paulo ...)





• Thanks to all of you, the Programme Organizing Committee and to the Local Organizing Committee, especially Peppe and Massimo:

Grazie mille per l'ottima organizzazione!



