

A Nordic ARClet

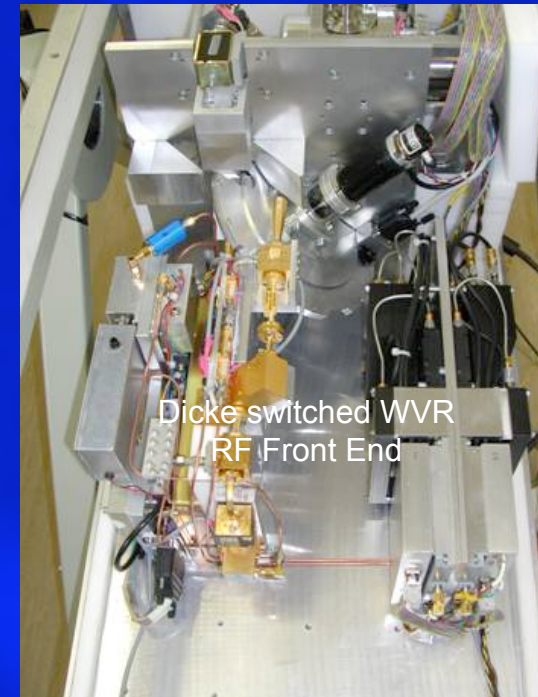
Hans Olofsson, John Conway

Onsala Space Observatory

ALMA Community Day, Garching, Sept 2007

Swedish ALMA Contributions

- Roy Booth (former director) – LSA initiative
- Science – S. Aalto member ESAC/ASAC European and ALMA wide Science Advisory Committees. J. Conway member of ALMA Science IPT (Integrated Product Team)
- Water Vapour Radiometer (vital for atmospheric phase correction) – Onsala design chosen and will be mass produced.
- Band 5 receivers – 6 to be built to start with by Chalmers receiver group (V. Belitsky)
- Configuration design – J. Conway



Onsala-designed WVR

Millimetre and Interferometry Expertise

- Long involvement in mm-astronomy, single dish Onsala 20m, SEST (50%) and APEX (23%) – providing facility receivers
- Interferometry experience, via VLBI, in astronomy and geodesy. Development of imaging algorithms (MFS), phase/delay calibration, WVRs, geodesy/astrometry
- Science use of ATCA, BIMA/OVRO and IRAM mm interferometers.



Nordic ARClet Structure

- Primary mission to serve Nordic ESO member communities (Sweden, Finland, Denmark).
- Also possible limited support for Norway, Baltic countries, etc
- Sweden-Finland-Denmark, agree to centre activity at Onsala
- Estimated user community suggest 2-3 permanent FTEs + postdocs
- Nordic contact group Jorma Harju (Finland) and David

Funding and Jobs available

- Recent Onsala National Facility mid –term review gave substantial increase in funding ramping up over 3 years. Part of this will fund ARClet positions, including
- ARClet director – John Conway (20% level)
- 2 new permanent, full time positions, soon advertised to begin early 2008.
- - Interferometry Expert/Astronomer, preferably with software skills (will include time for reseach)
- - Software position, installing debugging user software.

Advert - Gothenburg region, nice place to live.



Other Funding

- Application to NORDFORSK (common Nordic funding) for postdoc salary.
- Discuss possible Danish and Finnish sources of money for postdocs.
- FP7 RadioNet funding for postdoc, specialising in one of the following areas: multi-frequency synthesis, robust self-calibration, astrometry, spectral line modelling/radiation transport.

Computing Resources

- Still under discussion
- Probable PC cluster to service face-to-face visits
- OSO will soon have 10Gbps connection for fast data transfer. Involved in projects for GRID use in VLBI data correlation. Possible distributed computing for "tough" imaging (mosaicing + pointing self-cal).