

EVLA Postprocessing Algorithms

EVLA Advisory Committee Meeting, March 19-20, 2009



Bob Dickman and Frazer Owen

New Mexico Operations

Atacama Large Millimeter/submillimeter Array
Expanded Very Large Array
Robert C. Byrd Green Bank Telescope
Very Long Baseline Array



Algorithm development working group (I)

- The EVLA project is well-positioned to deliver both its hardware and its data to the archive
- As part of its responsibilities, the CASA group is prepared to deliver the algorithms necessary to analyze most EVLA data sets (*cf.* Brian Glendenning's talk)
- However, the development of certain post processing algorithms unique to the EVLA is a significant general challenge, especially those required to reduce low-noise, wide-field, low frequency data sets
- Despite progress (see talks by Bhatnagar & Rau and by Rau), essentially, *no one* has yet worked out how to do this efficiently with very large, high fractional bandwidth data set

Algorithm development working group (II)

- An algorithm development working group has recently been established by NRAO
 - ❖ to support and focus the development of the most challenging algorithms
 - ❖ The goal for these special algorithms is to deliver them at a pace to match the schedule on which EVLA hardware capabilities will be delivered to the community
 - The group will:
 - ❖ define the needed algorithms development plan, at first just EVLA
 - ❖ coordinate with Algorithm Developers who will have a fraction of their functional time assigned to algorithm development
 - ❖ monitor the progress of the algorithm standard package implementation
 - ❖ organize commissioning by SciStaff
 - ❖ review feedback from the community
- **The group's work will be coordinated with that of CASA**

Initial staffing: ADWG

- Project Manager: Gareth Hunt
- Project Scientist: Frazer Owen
- Contributing members will include: Bhatnagar, Moellenbrock, Golap, Myers, Kogan, Greisen, Cotton, Fomalont, Reid, Uson
- Oversight committee: Hunt, Owen, Butler, B. Glendenning