Internal JIVE BlackHoleCam meeting

Date: 17 January 2017 , 13:30 in Arpad's office
Subject: pipeline WP
Present: Arpad Szomoru, Des Small, Mark Kettenis, Ilse van Bemmel

Fringecal
The porting to the C++ version is focuses on the FFT part first. This will result in a HOPS-analogy, without the globalization step in the fringe fit. The solver is still under investigation and needs to be tested locally before implementing in CASA. Tammo Jan is a key person to help here and get the solver into casacore.

Ilse and Des are verifying the results using closure phases from the AIPS and CASA calibration. These are identical for the first NME, but show issues in a second analysis. Des will write a quick-look script to get the time and frequency averaged phases per baseline directly from the MS (done).

Ilse has been processing LOFAR data in the CASA fringecal prototype. This led to some problems with the LOFAR MS format in CASA, for which Ger van Diepen provided a workaround.

Other issues
Mark is working with the Nijmegen people to get GMVA data imported into CASA, the DiFX data format is not consistent with the FITS-IDI standards.

Rebranding
This work will continue under the RadioNet RINGS JRA. The meetings will continue on a monthly basis, and will be renamed CASA-VLBI. Tammo Jan Dijkema will join for the next meetings.

Actions
6: includes the closure phase analysis from action 44
31,32: JIRA tickets awaiting action from George
36-38: await porting to C++

ID	Description	Owner	Ref.	Due
6	Write report on verification with AIPS (deliverable)	Ilse	151019	Ongoing
18	Process EVN data with CASA	Mark & Des	160115	Ongoing
31	Definition of gain curve in CASA	Mark	160620	
32	Implement apply Tsys for MS	Mark	160620	
35	List of minimum parameters for fringecal	Ilse	160609	Done
36	Define CASA XML template for fringecal	Ilse/Des	160609	
37	Verification C++ fringecal against AIPS	Ilse/Des	160609	
38	Benchmark fringecal	TBD	160609	
44	Compare closure phases AIPS/CASA	Ilse	161219	Done
45	Assess Ceres solver	Des	161219	
46	Assess impact of gain correction on weights	Mark?	161219	

Next meeting: 13 February 2017