



Contribution ID: 76

Type: **not specified**

LOFAR offline interference detection

Wednesday, 24 March 2010 17:05 (15 minutes)

The LOFAR telescope embeds various techniques to deal with radio frequency interference (RFI). One of these techniques is a completely automated post-correlation flagger. For this purpose, several post-correlation classification methods for efficient detection and flagging of RFI have been designed and compared. Currently, the selected flagging strategy is the “SumThreshold” method, which consists of an iterative surface fit in the time frequency plane and a new combinatorial thresholding technique. Several tweaks can enhance speed, quality and purpose, for example, to allow pulsar data to be flagged. Scaling various RFI flagging methods, such as flagging on auto instead of cross-correlations, to the large number of stations projected for the SKA, requires some further thoughts. Some ideas about this will be presented.

Primary author: Mr OFFRINGA, André (Kapteyn Astronomical Institute)

Co-authors: Prof. DE BRUYN, Ger (Astron & Kapteyn Astronomical Institute Groningen); Dr BIEHL, Michael (Institute for Mathematics and Computing Science, University of Groningen); Prof. ZAROUBI, Saleem (Kapteyn Astronomical Institute Groningen)

Presenter: Mr OFFRINGA, André (Kapteyn Astronomical Institute)

Session Classification: Signal Transport, Signal Processing, Software, & Data Management

Track Classification: Signal Transport, Signal Processing, Software, and Data Management