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Forward Application of Propagation Path Effects in Radio Interferometry Using Measurement Equations

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Abstract content
   (Max 300 words)

The Radio Interferometric Measurement Equation (RIME) is an elegant mathematical formalism that is uniquely suited for modelling both the direction-independent (DIEs) and the direction-dependent (DDEs) observational effects exhibited by existing radio interferometers (VLA, GMRT, WSRT) and upcoming instruments like SKA and its pathfinders. This paper provides a brief introduction to the RIME and proceeds to discuss how it is being implemented for predicting visibilities from the sky model in MeqTrees, a software package for radio interferometric simulation and calibration.

Apply to be
 consider for a student
   award (Yes / No)?

Yes

Level for award
 (Hons, MSc,
   PhD)?

MSc

Main supervisor (name and email)
and his / her institution

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Would you like to <br> submit a short paper <br> for the Conference
 Proceedings (Yes / No)?

Yes

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