

# A Generic and Efficient E-field Parallel Imaging Correlator for Next-Generation Radio Telescopes

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## ABSTRACT

Abstract here (250 words)

**Key words:** instrumentation: interferometers – techniques: image processing – techniques: interferometric

## 1 INTRODUCTION

Motivate MOFF from a technical and scientific standpoint. Refer to [Deller et al. \(2007\)](#); [Morales & Matejek \(2009\)](#); [Morales \(2011\)](#).

## 2 MATHEMATICAL FRAMEWORK

Refresh the math equivalence between MOFF and FX.

## 3 SOFTWARE IMPLEMENTATION

Discuss implementation and make code available for public.  
Calibration

## 4 VERIFICATION

Show examples using simulations  
Discuss PSF differences due to slight differences arising out of gridding  
Apply it on LWA data

## 5 ANALYSIS AND FEASIBILITY

### 5.1 Scaling Relations: MOFF vs. FX

### 5.2 Scaling Up

### 5.3 Case Study

## 6 CONCLUSIONS

## ACKNOWLEDGEMENTS

The Acknowledgements section is not numbered. Here you can thank helpful colleagues, acknowledge funding agencies, telescopes and facilities used etc. Try to keep it short.

## REFERENCES

Deller A. T., Tingay S. J., Bailes M., West C., 2007, [PASP](#), **119**, 318  
Morales M. F., 2011, [PASP](#), **123**, 1265  
Morales M. F., Matejek M., 2009, [MNRAS](#), **400**, 1814

## APPENDIX A: SOME EXTRA MATERIAL

If you want to present additional material which would interrupt the flow of the main paper, it can be placed in an Appendix which appears after the list of references.

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