# METSÄHOVI AGN PROJECTS CONTRIBUTING TO THE PLANCK FOREGROUND SCIENCE

*M. Tornikoski*[1], *A. Lähteenmäki*[1], *T. Hovatta*[1], *E. Nieppola*[1], *I. Torniainen*[1], *E. Valtaoja*[2]

[1]Helsinki University of Technology, Metsähovi Radio Observatory
Metsähovintie 114, 02540–Kylmälä, Finland
[2]Tuorla Observatory, University of Turku, Finland
merja.tornikoski@tkk.fi

During recent years we have had a special focus in our Metsähovi observing projects. We have put an emphasis on the understanding of AGNs that could contribute to the extragalactic foreground that will be detectable by the Planck satellite.

First of all, we have observed completely new source samples. Many AGN samples have been excluded from high-frequency radio observations earlier simply because they were assumed to be too faint or "uninteresting". One of our largest new source samples was the complete BL Lacertae Object (BLO) sample.

In addition to the few-epoch observations of large source samples we have been interested in the long-term variability behaviour of a densely monitored set of sources. We have analysed these data in order to improve our understanding of the variability behaviour of these sources: how often do flares typically occur in a certain source, and how likely is e.g. the Planck satellite to detect a source in a flaring state at a random observing epoch?

We are also working our way towards predicting, or at least making "educated guesses" about, the activity behaviour of radio-bright AGNs.

In this presentation we will discuss our source samples and show some recent results.