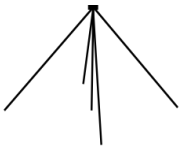
Radio galaxies at low frequencies: high spatial and spectral resolution studies with LOFAR

Morabito, L.K.

Radio Galaxies at Low Frequencies

high spatial and spectral resolution studies with LOFAR



Leah K. Morabito

ISBN: 978-90-9029907-5

Cover: Design and images by Leah K. Morabito.

Background: A portion of a wide-field image around a high redshift radio galaxy, 4C 39.37, at 56 MHz using only 2 MHz of bandwidth from a Low Frequency Array observation made with the Low Band Antenna.

Foreground: At the top is a representation of a Low Band Antenna dipole. In the left circle is the stacked line profile from the first extragalactic detection of carbon radio recombination lines, and in the right circle are smoothed contours from the highest resolution image at frequencies below 100 MHz.

Radio Galaxies at Low Frequencies

high spatial and spectral resolution studies with LOFAR

Proefschrift

ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus prof. mr. C.J.J.M. Stolker,
volgens besluit van het College voor Promoties
te verdedigen op dinsdag 13 september 2016
klokke 13:45 uur

door

Leah K. Morabito

geboren te Englewood, Colorado, Verenigde Staten
in 1983

Promotiecommissie

Promotor:	Prof. dr. Huub Röttgering	Leiden University
Co-Promotor:	Prof. dr. George Miley	Leiden University
Overige leden:	Prof. dr. Michael Garrett	ASTRON/Leiden University
	Prof. dr. Raffaella Morganti	ASTRON/University of Grongingen
	Prof. dr. Alexander Tielens	Leiden University
	Prof. dr. Huib van Langevelde	JIVE/Leiden University
	Dr. Adam Deller	ASTRON
	Dr. Huib Intema	Leiden University
	Dr. Raymond Oonk	ASTRON/Leiden University

To follow knowledge like a sinking star,
Beyond the utmost bound of human thought.
◂ Alfred Lord Tennyson ▸

Contents

List of Figures

List of Tables