



**LOFAR**

# Polish contribution to LOFAR

Katarzyna Otmianowska-Mazur

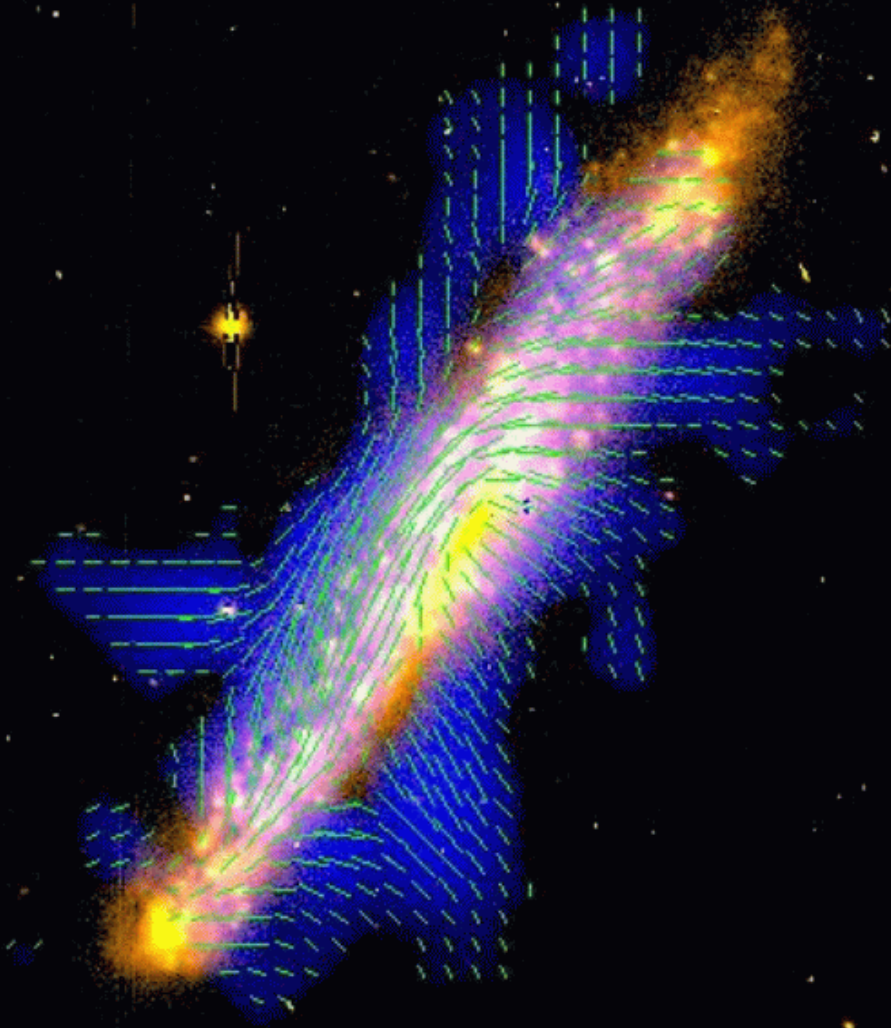
Marian Soida

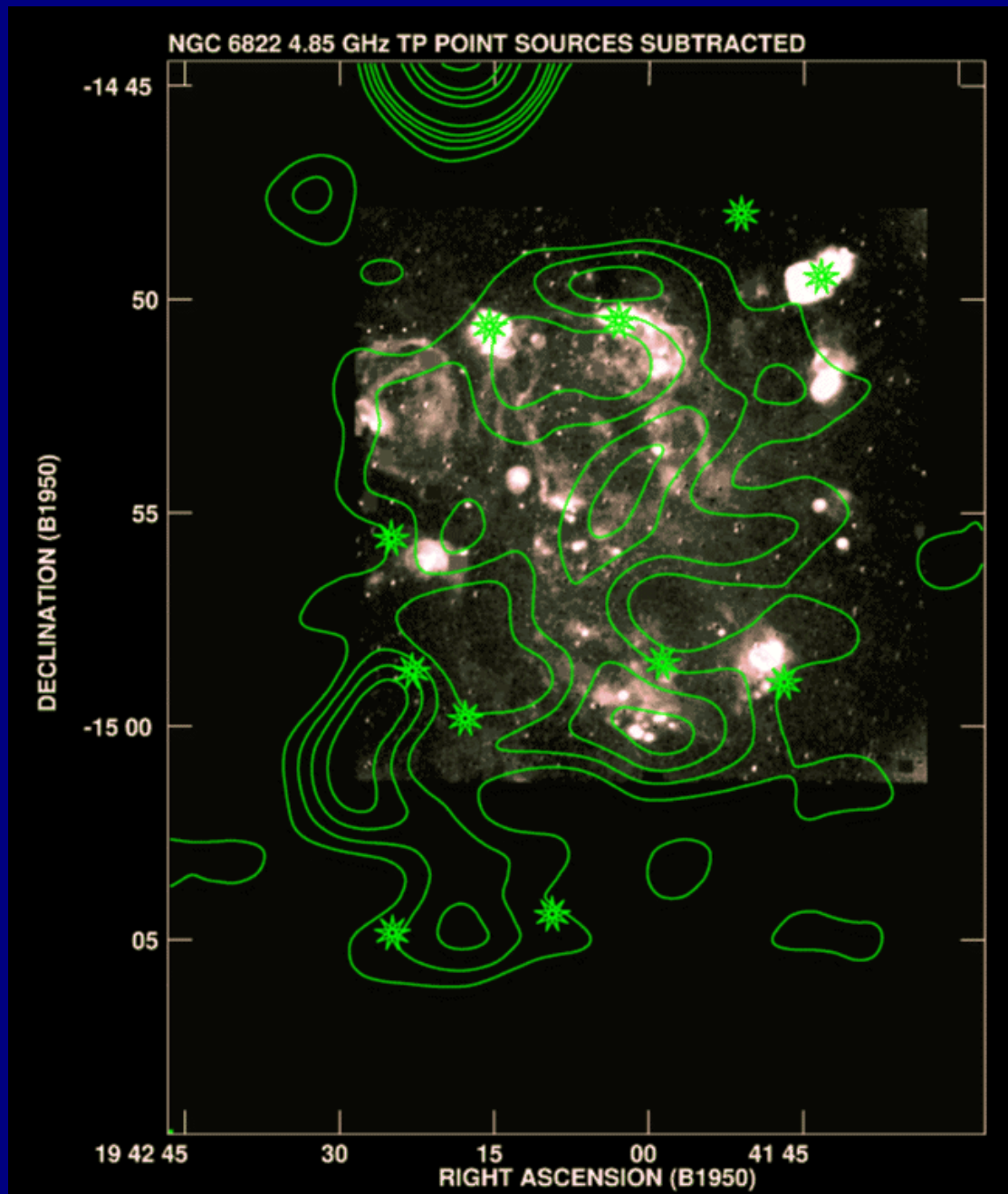


# LOFAR

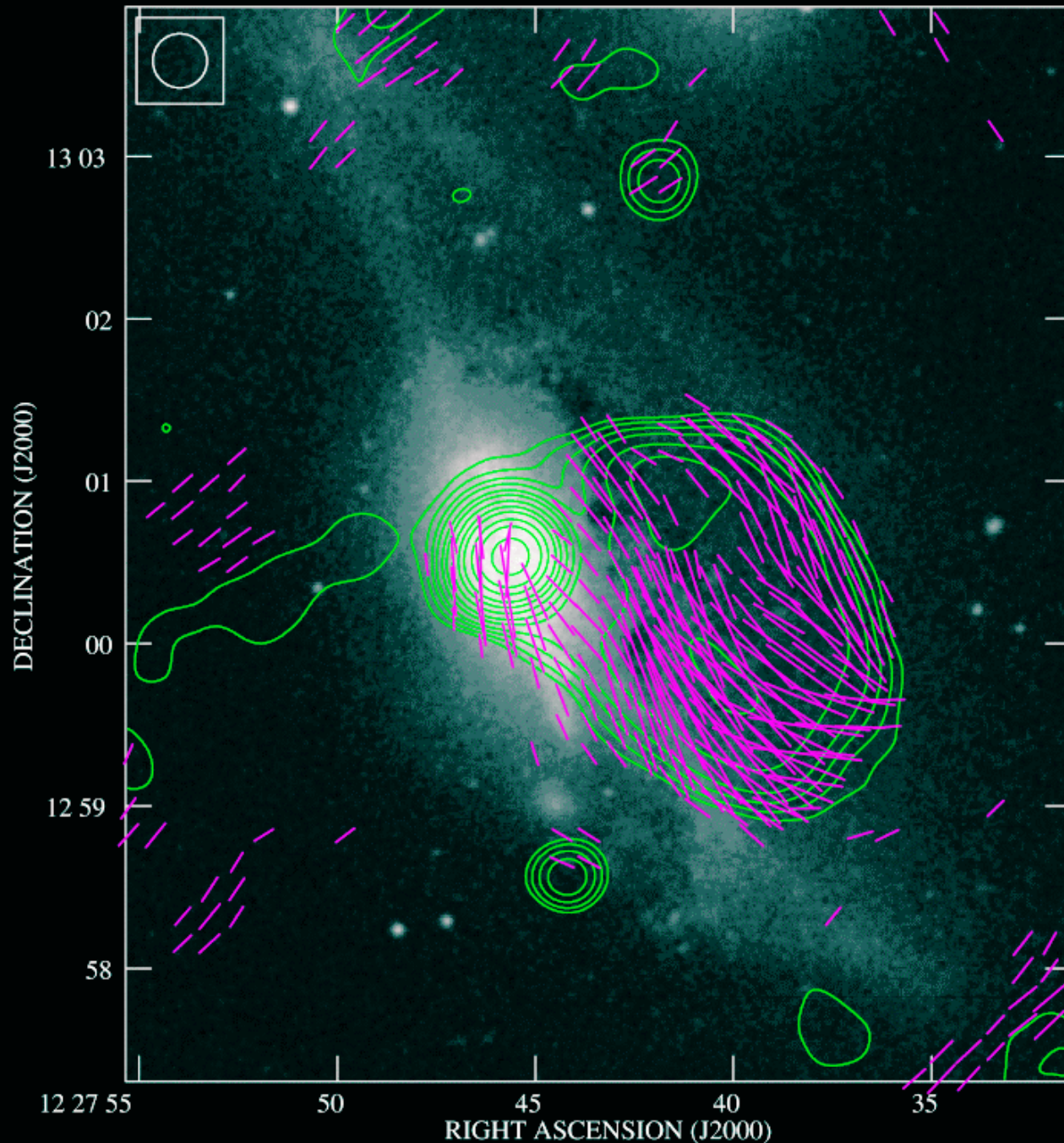
- Uniwersytet Jagielloński, Kraków
- Uniwersytet im. Mikołaja Kopernika, Toruń
- Centrum Badań Kosmicznych PAN, Warszawa
- Uniwersytet Szczeciński, Szczecin
- Uniwersytet Zielonogórski, Zielona Góra
- *PIONIER*

**NGC 5775**  
(Tuellmann, Soida,  
Dettmar, Urbanik  
et al. 2000)

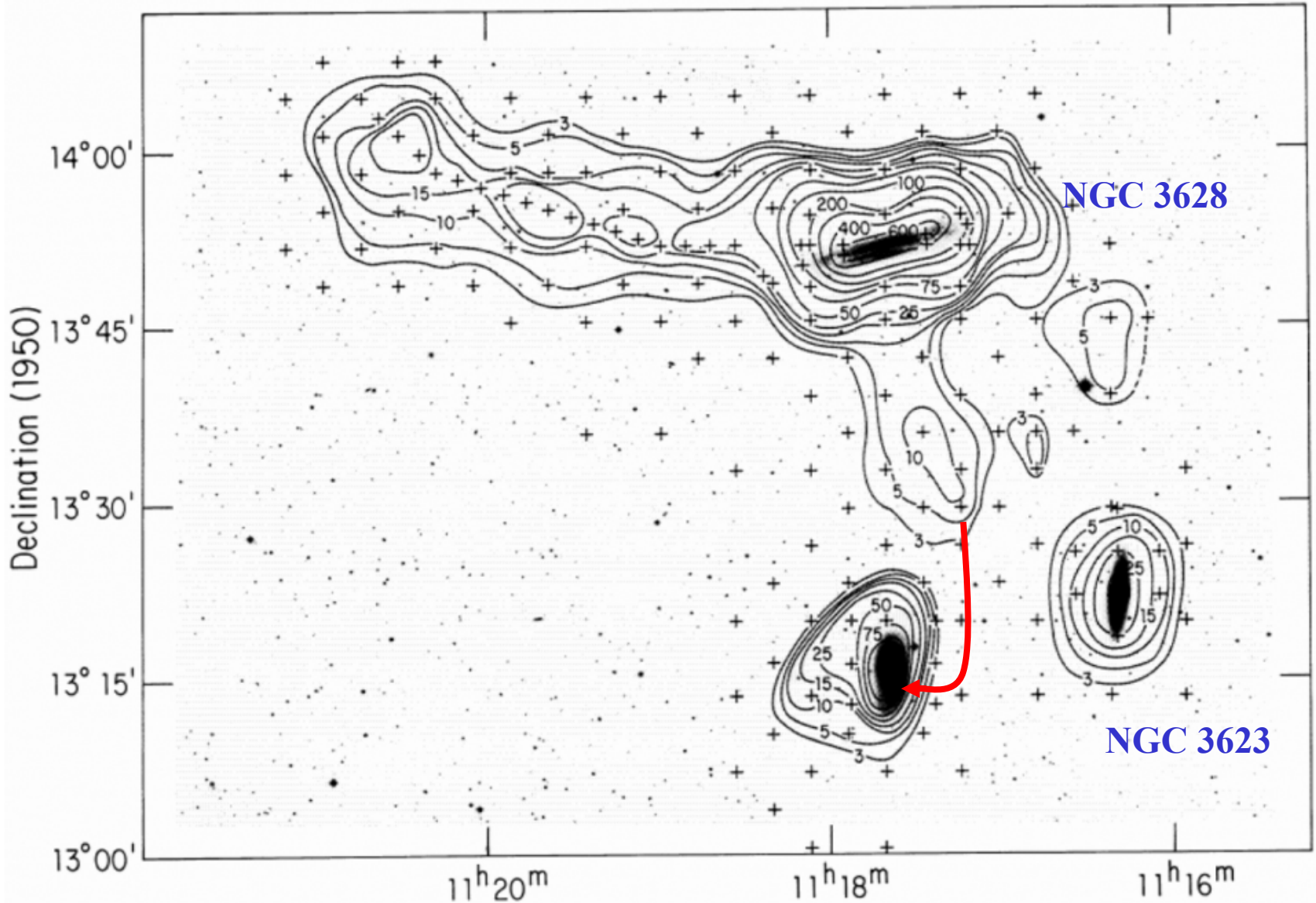




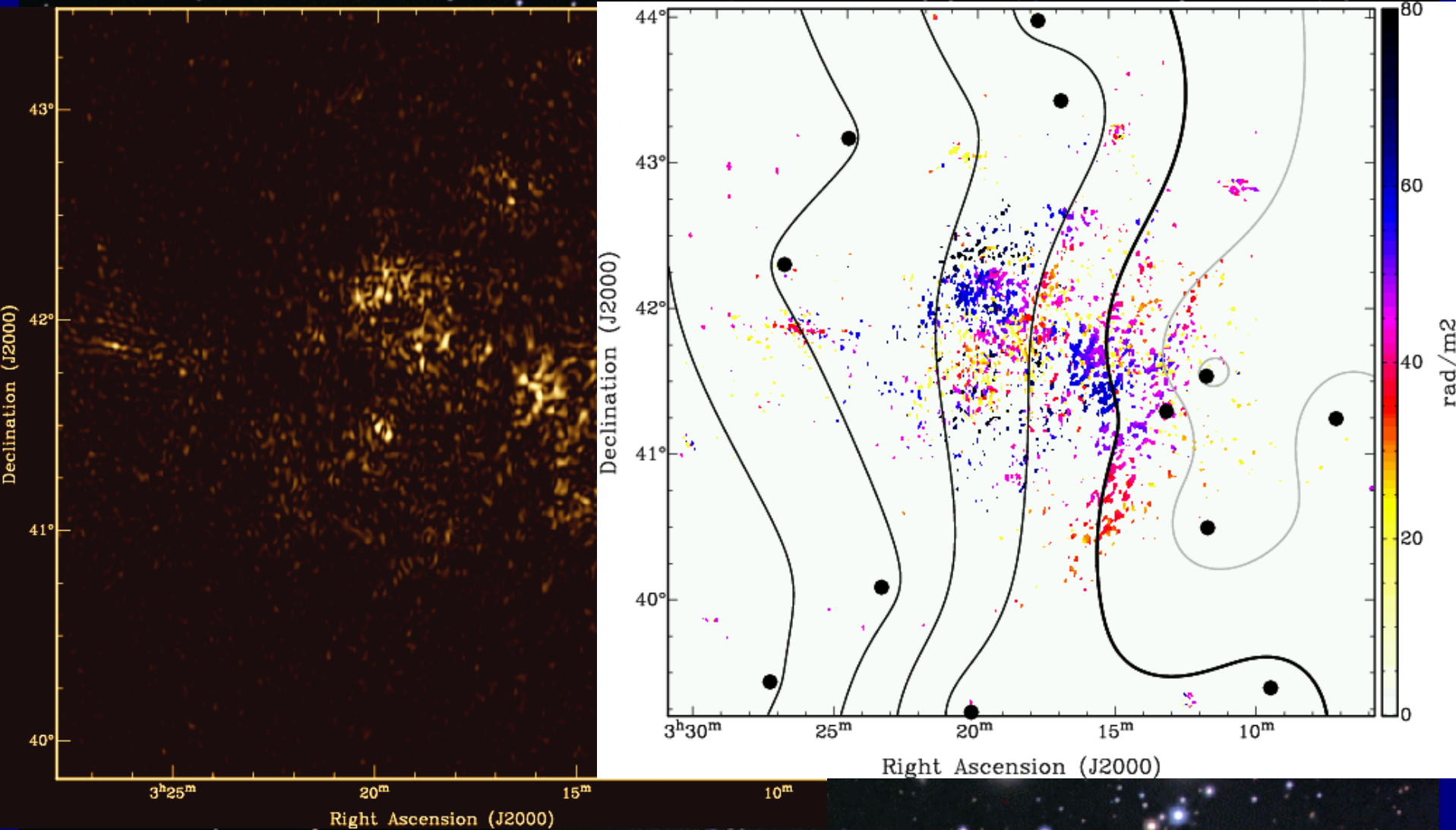
**Chyży et al.  
2003**

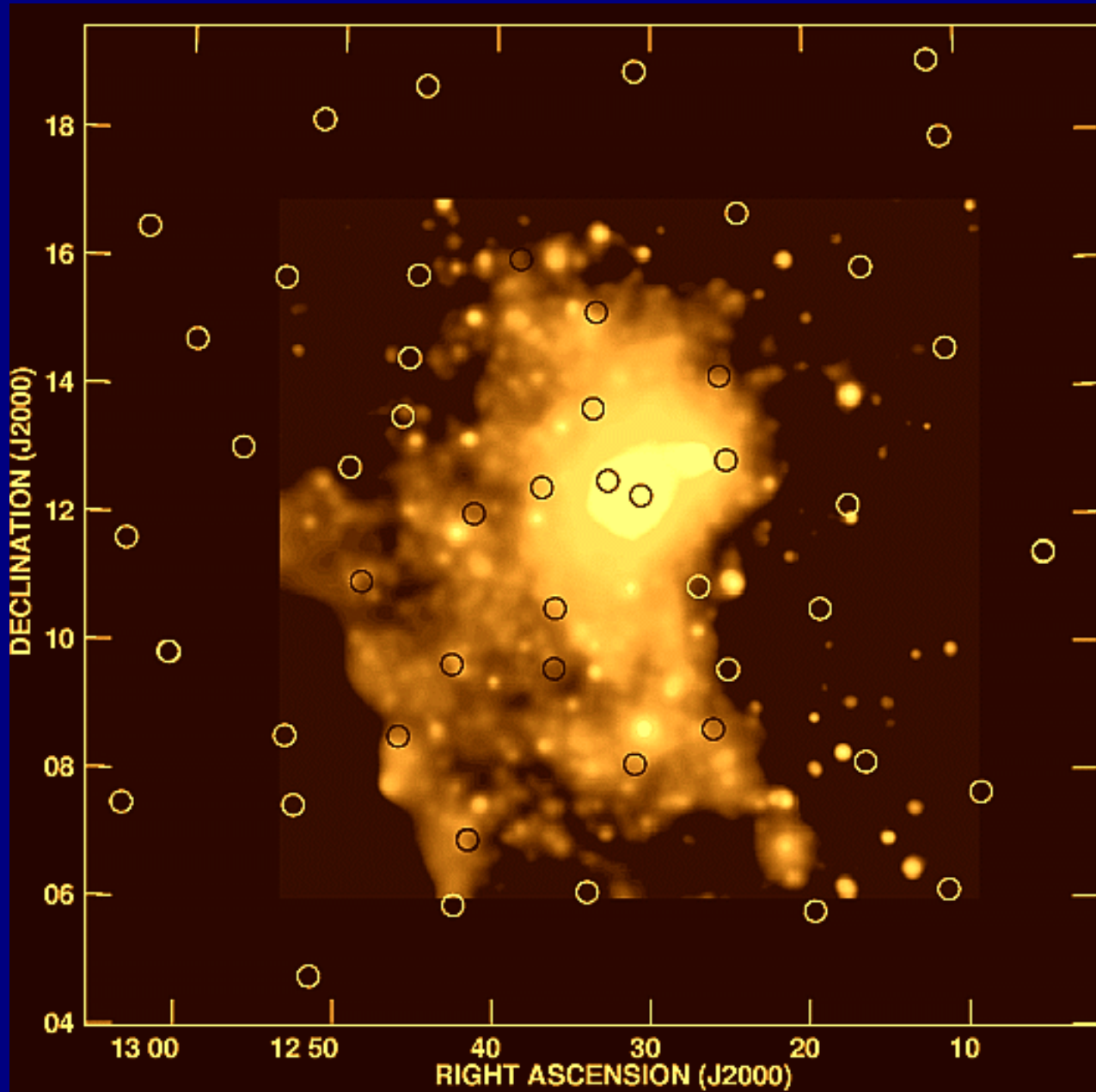


**Vollmer + the  
whole Kraków  
group**



# Perseus Cluster WSRT 315 - 360 MHz Brentjens & de Bruyn 2005





**Virgo in X-rays**  
(Boehringer 1994)

*VLA RM project*  
(in progress,  
*Knapik et al.*)

# Kraków radio continuum field of interest

<b>LSB galaxies, stability of the ISM in LSB, magnetic fields in LS, radio-bright parts of galaxies (outer halo, HI disks of BCG)</b>	<i>TP and pol. emission, RM of background sources for large, nearby objects, RM synthesis for more distant objects</i>
<b>Tails, outflows, old outflows from interacting/merging spirals</b>	<i>Sensitive search for a weak (polarized?) emission</i>
<b>Systematic searches of intergalactic emission in groups and clusters of galaxies</b>	<i>Sensitive search for a weak (polarized?) emission</i>
<b>The magnetic field structure in clusters and superclusters</b>	<i>TP and pol. emission, RM of background sources for large, nearby objects, RM synthesis for more distant objects</i>
<b>Radio spectra: thermal and nonthermal fraction in high-z starburst galaxies (rel. importance of magnetic fields, their role in SF, stability of the ISM)</b>	<i>Multifrequency flux density measurements of distant galaxies (HDF? High-z ULIRG?)</i>
<b>Giant double radio sources at high z, steep spectrum envelopes of giant double radio sources</b>	<i>Multifrequency total power and polarization mapping of giant radio sources at large redshifts</i>