

GG Tau, the ring world

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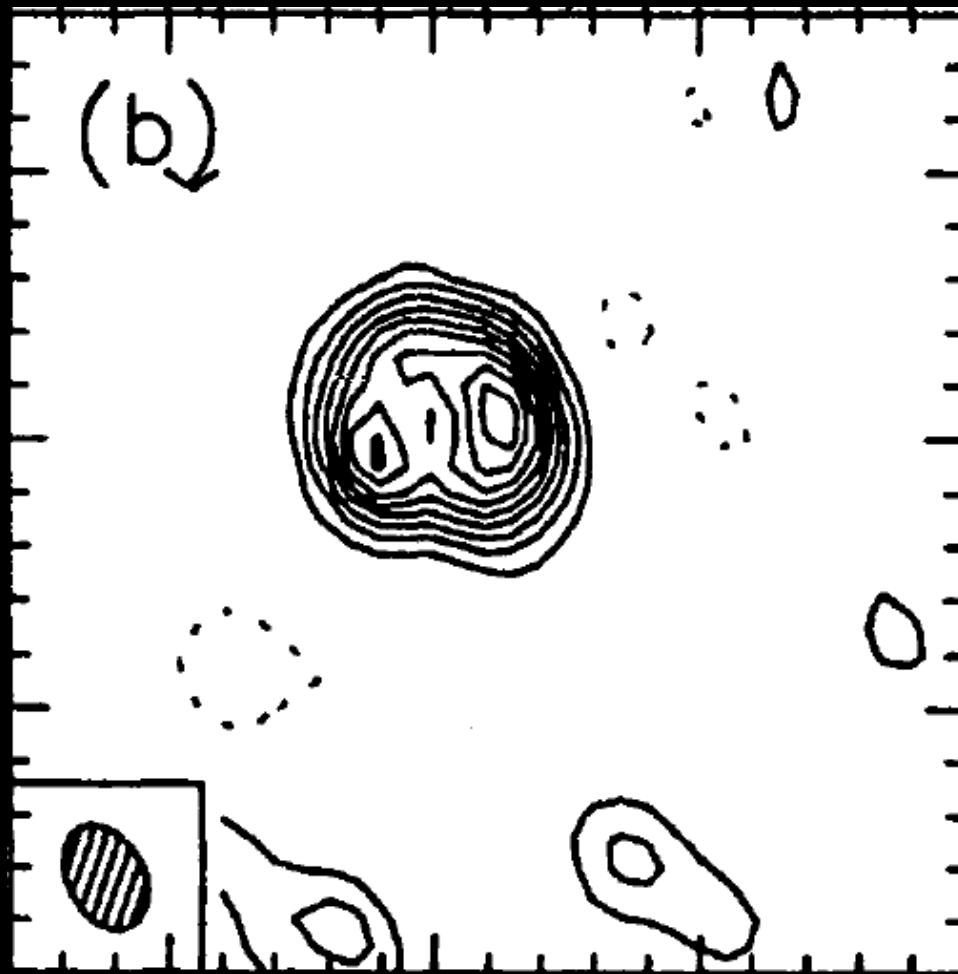
GG Tau: binary T Tauri stars

Hierarchical quadruple system: “binary of binary”.

One close binary surrounded a **circumbinary disk and ring**.

Observed over the year, it testifies of the enhancement of the PdBI abilities.

PdBI in 1993 ...



Dutrey et al. 1994

3mm continuum

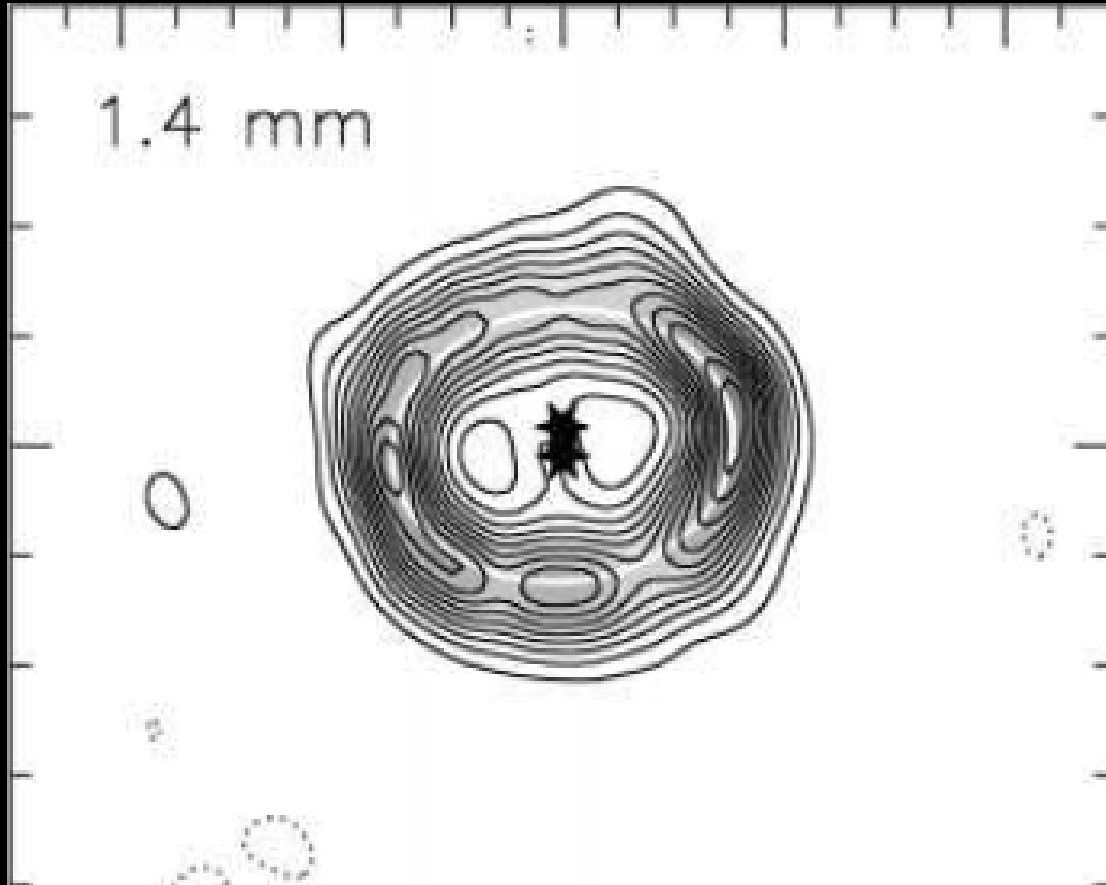
Only 3 antennas, hence 3 baselines.

Needed 9 configurations to have 27 baselines.

Longest baseline available ~ 280m.

Resolution: 2.6 x 2.1"

PdBI in 1997 ...



1.4 mm continuum

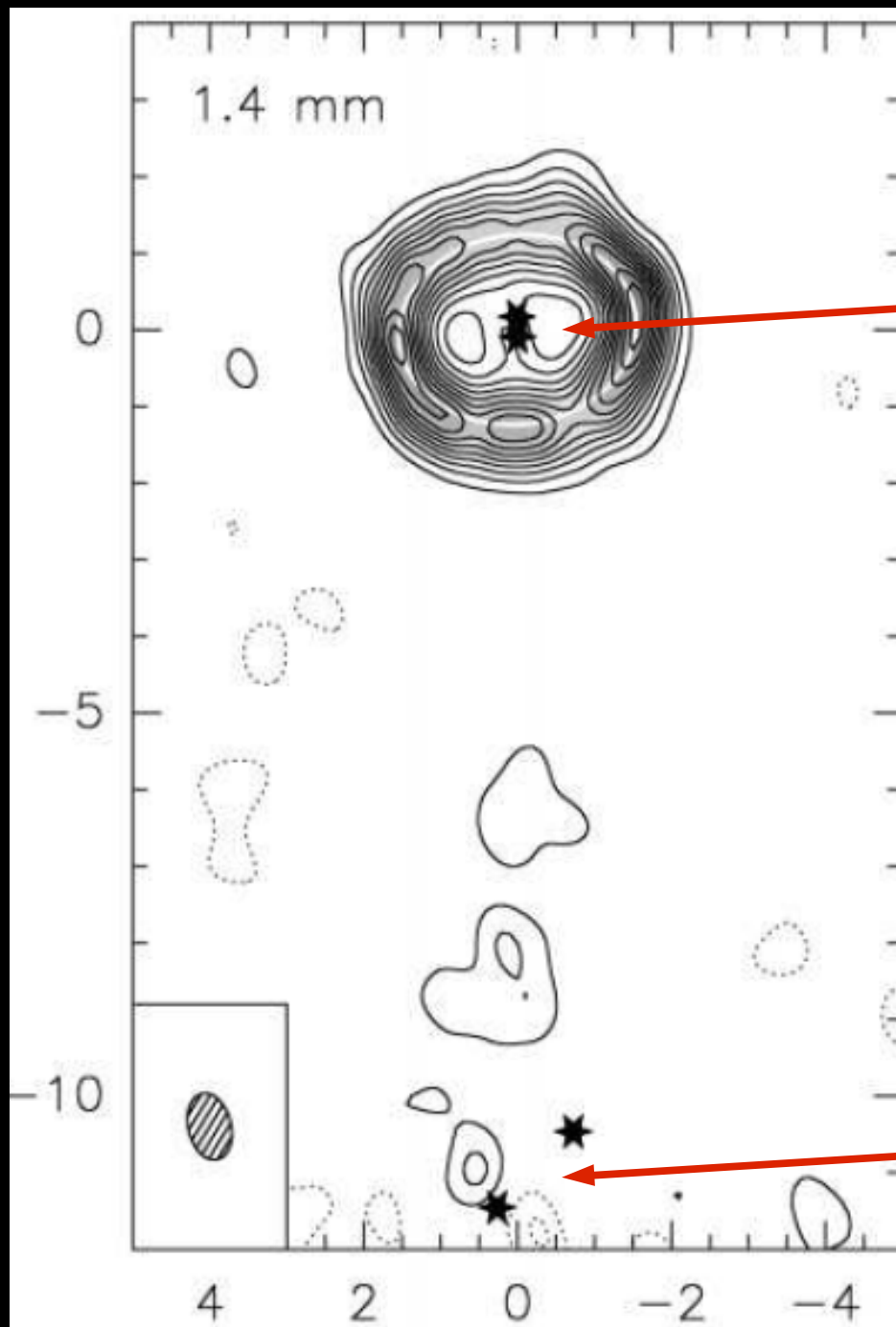
5 antennas, hence 10
baselines.

Longest baseline
available ~ 400 m.

Resolution: $0.88 \times 0.56''$

Ring resolved.

Guilloteau et al. 1999



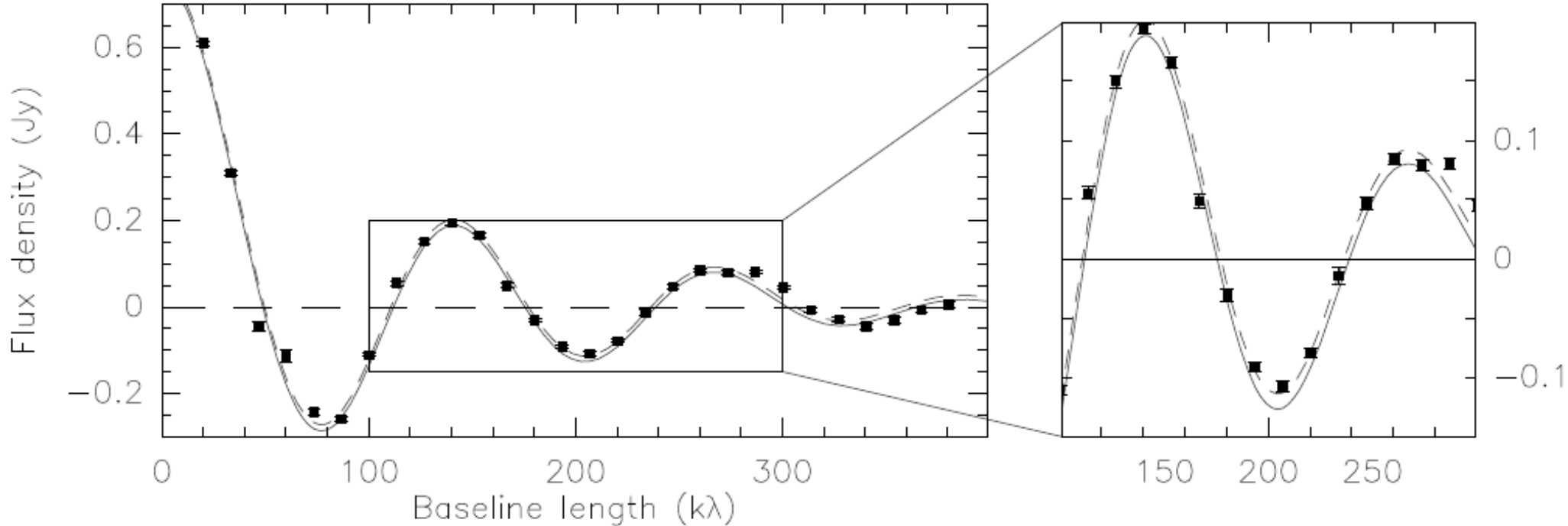
GG Tau A

GG Tau B

PdBI in 2007 ...

6 antennas, 760 m baseline, 1.1 mm continuum

Resolution: $0.45 \times 0.25''$



Pietu et al. 2010

PdBI in 2007 ...

