

# Anita Richards

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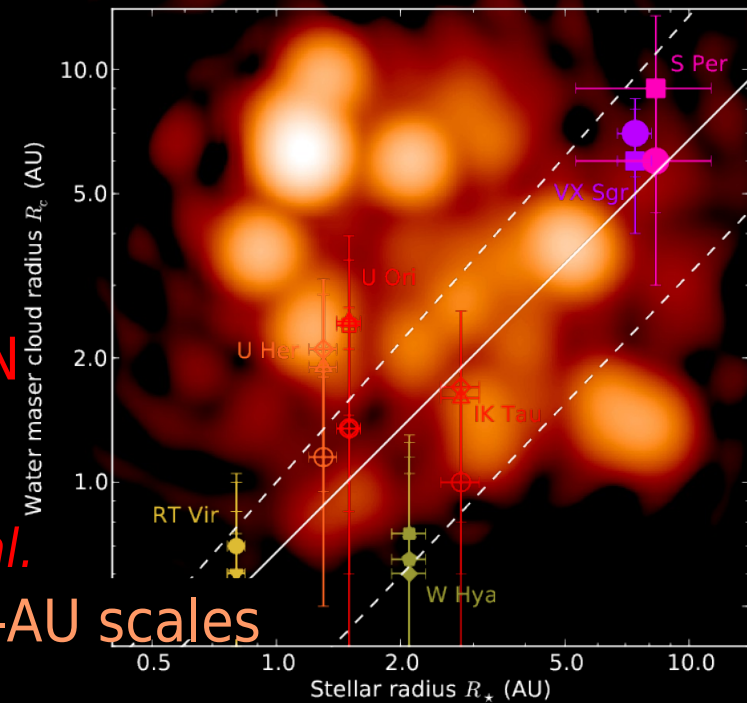
## How do evolved stars lose mass?

### Betelgeuse imaged by e-MERLIN

- Convection cells/starspots?
- SW extension (similar in IR)
- *Kervella, Decin, MacDonald et al.*

### Masers trace mass loss on sub-AU scales

- *Assaf et al.* (SiO)
- H<sub>2</sub>O clouds ~50x over-dense
  - Cloud size  $\propto$  star size
- *Richards, Etoka, Gray et al. 2010,12*

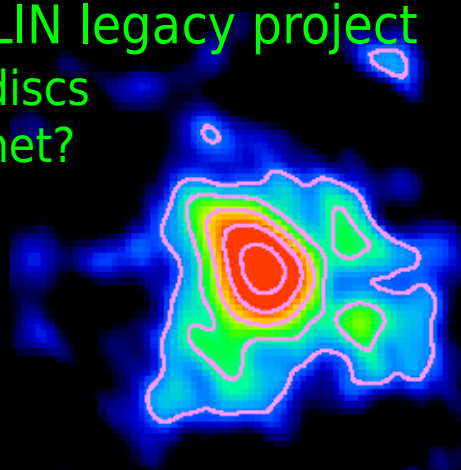


Ongoing



## Planets

- Greaves et al.
- PEBBLES e-MERLIN legacy project
  - Protoplanetary discs
  - HL Tau protoplanet?
- MERLIN
- CO in Pluto/KBO
  - ALMA



## Radio Interferometry

- ALMA support



EUROPEAN ARC  
ALMA Regional Centre || UK



- RadioNet training coordinator



- CUP handbook Practical Radio Interferometry (*Richards & Laing*)