

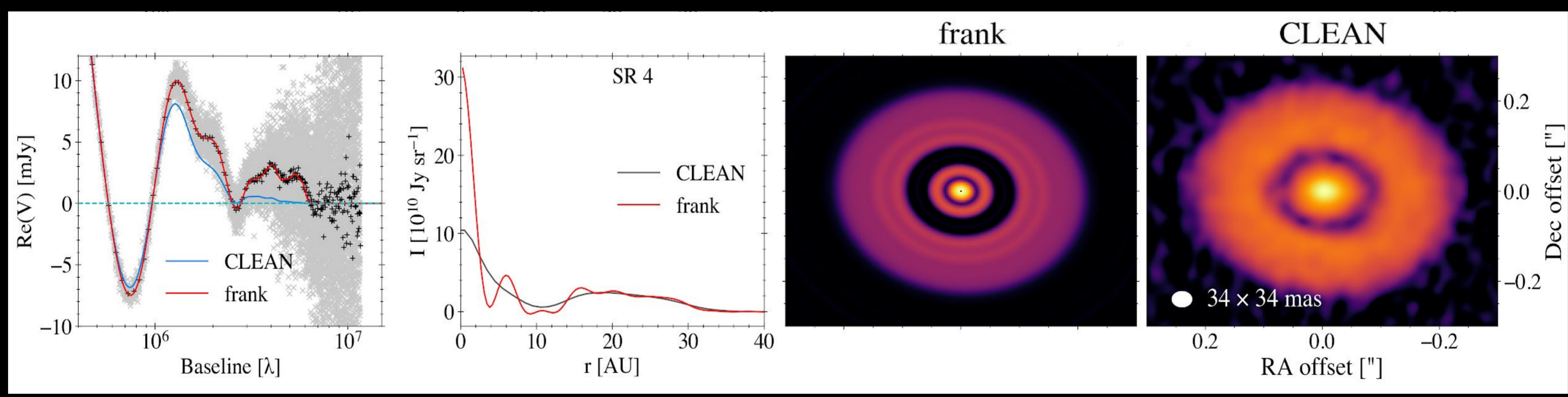
FRANKENSTEIN,
The flux reconstructor
Fit a nonparametric,
super-resolution disc
brightness profile in <1 minute

WHAT?
A fast, accurate,
linear model
to recover the radial
brightness profile of a
disc from sub-mm
observations by fitting
the unbinned
visibilities

BUT WHY?!
To probe
disc substructure
at a higher resolution
than that obtained in a
CLEAN image, while
removing the
assumptions of
parametric visibility
domain models

AND HOW?
A Bessel series
expression for the
brightness profile,
transformed into the
Fourier domain with
the discrete Hankel
transform and regularized
by a nonparametric
Gaussian
process

With **FRANKENSTEIN** you (yes, You!) can obtain
a super-resolution brightness profile
by accurately fitting the visibilities
to longer baseline than **CLEAN**:



Is it...alive?
It's ALIVE!!!
Perform a fit in one line from the terminal.
Check it out at discsim.github.io/frank.

Questions? Comments? Ideas?
Please do find me on Slack
during the conference, or just
reach out! jmj51@ast.cam.ac.uk