## The Circumstellar Environment of SN 1997 eg

Jennifer L. Hoffman, UC Berkeley

Multi-epoch Keck spectropolarimetry yields clues to the structure of the circumstellar material around this Type IIn supernova.

1. Blue Balmer emission line wings in scattered light but not direct light


The polarized flux spectrum ( $\% \mathrm{P} \times \mathrm{F}$ ) is the spectrum of the scattered light in the system.
It is a small percentage of the total flux, but here the line profiles are overlaid for comparison of their widths.
2. Q-U loops instead of straight lines across Balmer and He I profiles


This research was supported by NSF Astronomy \&
Astrophysics Postdoctoral Fellowship AST-0302123.
emission and scattering regions are aspherical
and misaligned.
emission and scattering regions are aspherical
and misaligned.

scattering region obscures its own receding side.


For more details, see http://grammai.org/jhoffman/sne.

