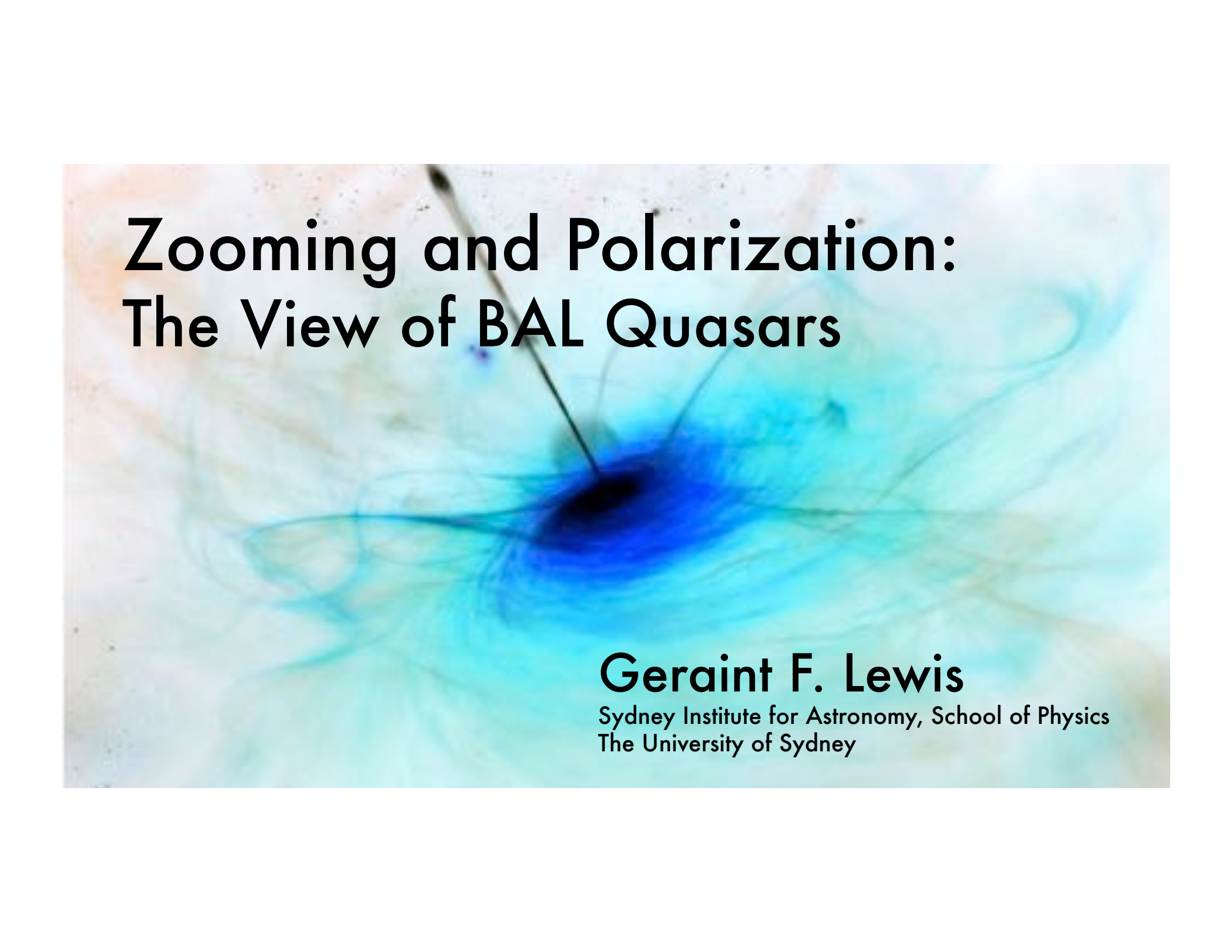


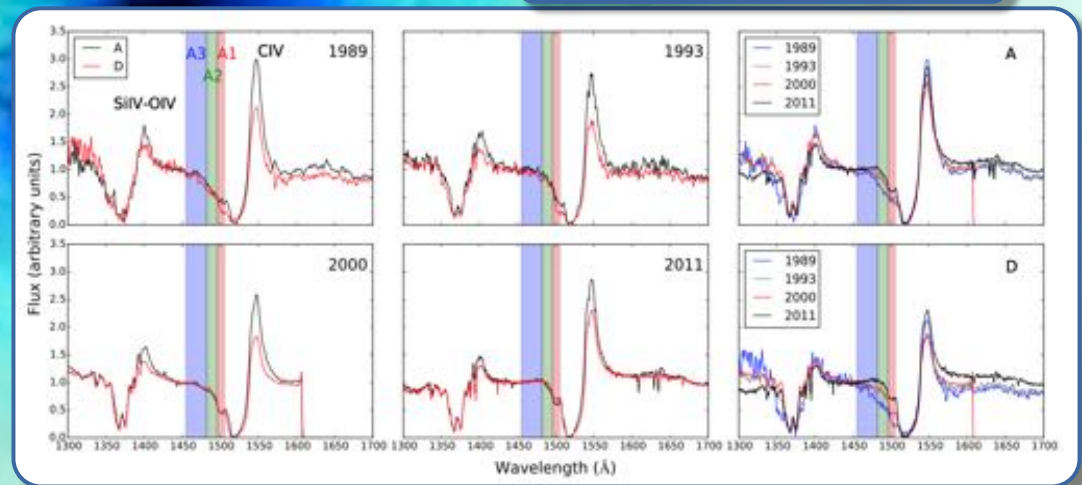
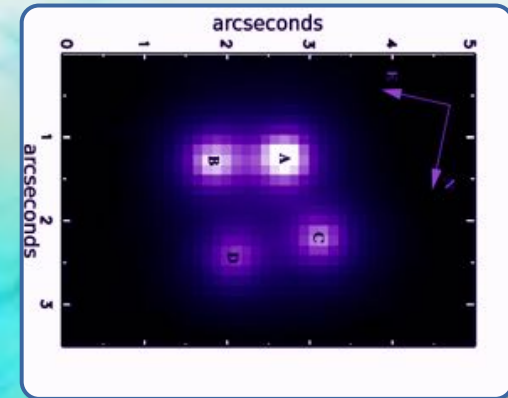
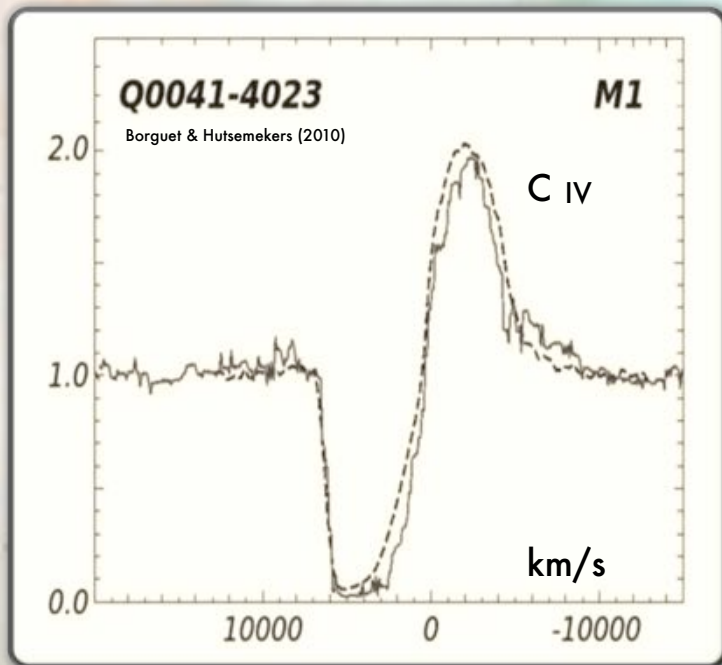


Zooming and Polarization: The View of BAL Quasars

Geraint F. Lewis

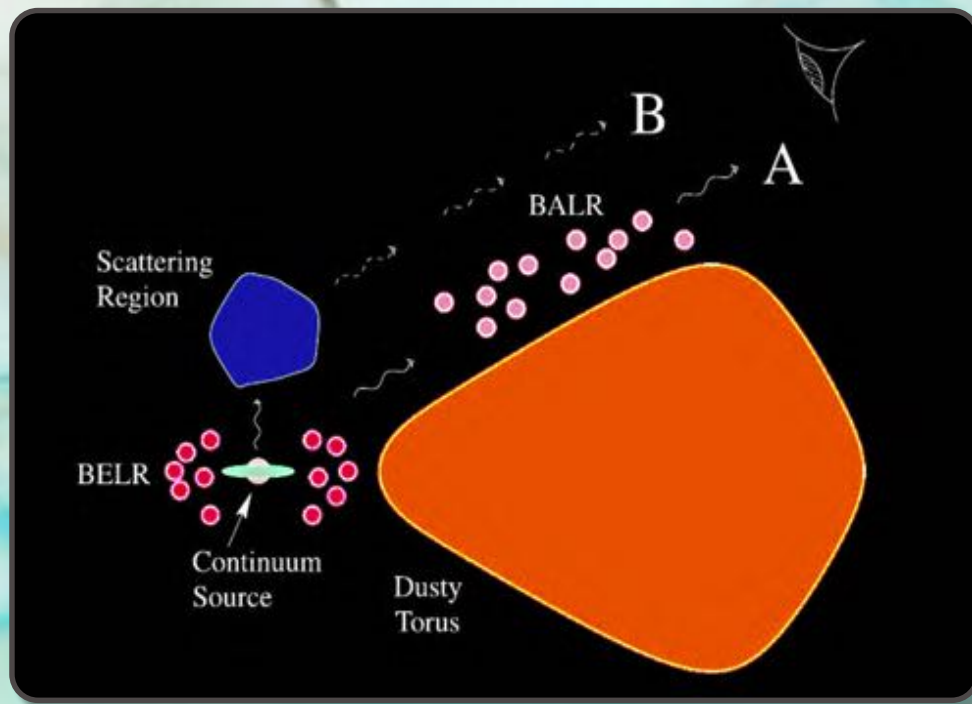
Sydney Institute for Astronomy, School of Physics
The University of Sydney

Broad Absorption Line Quasars

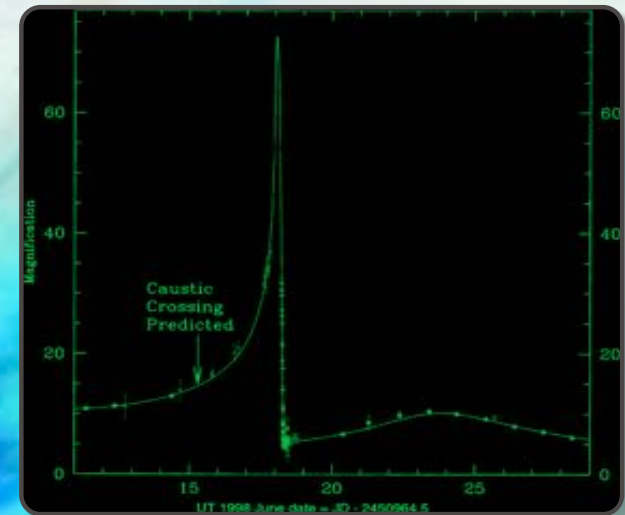
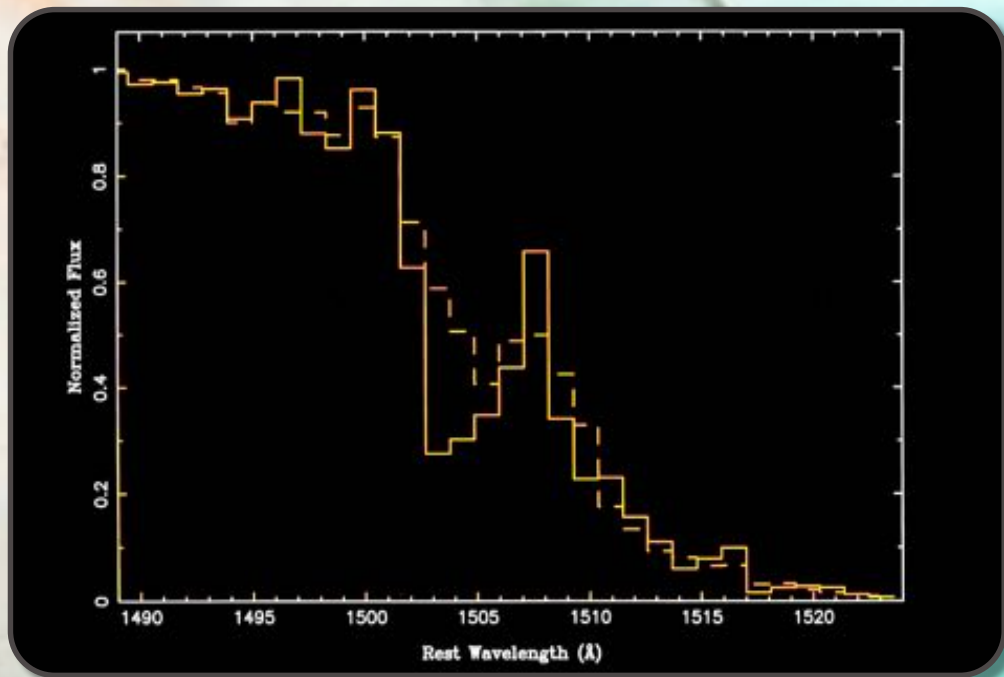


Sluse et al. (2015)

Broad Absorption Line Quasars



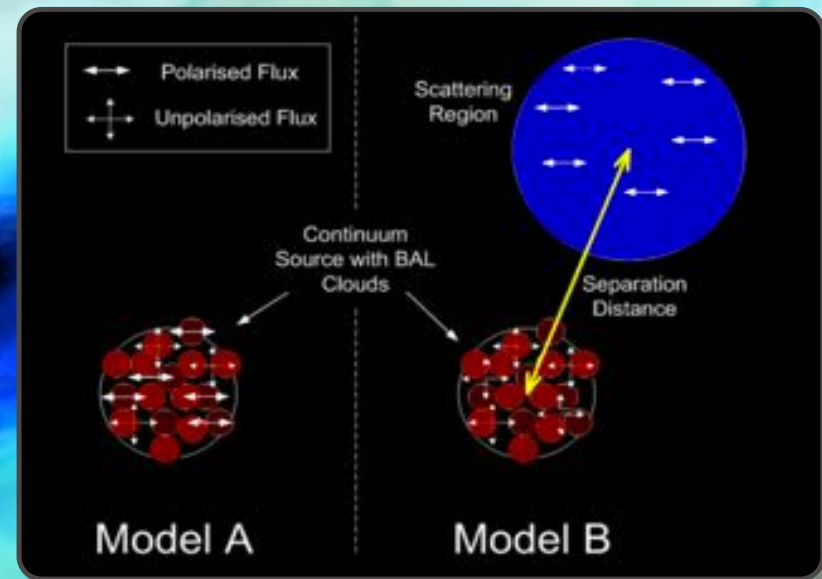
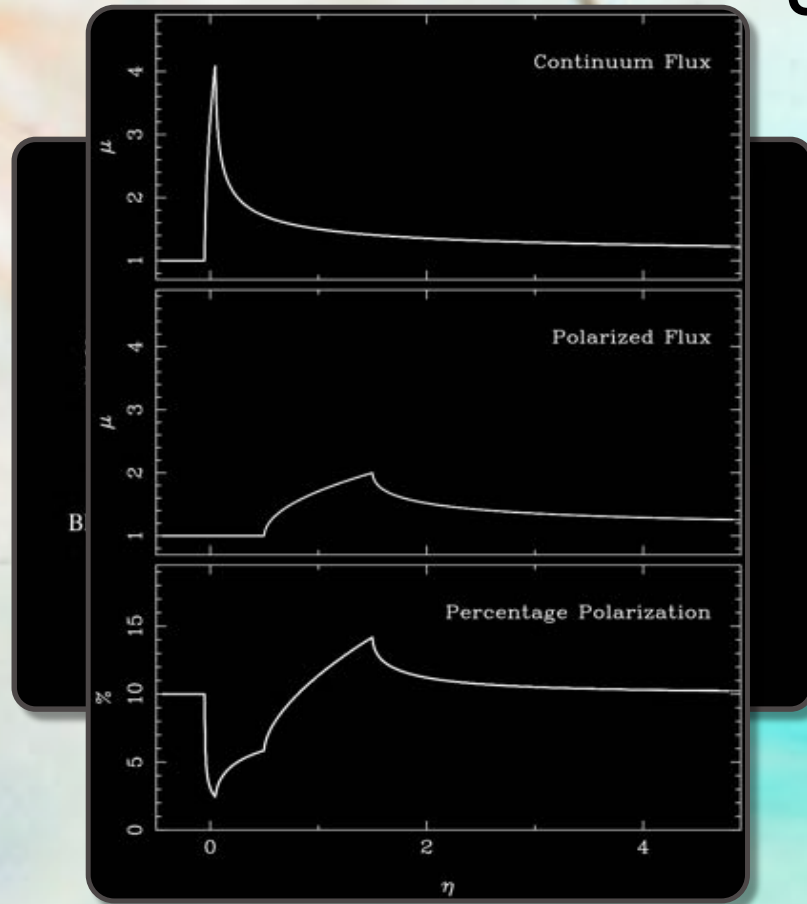
BAL Quasars: Cloud Size



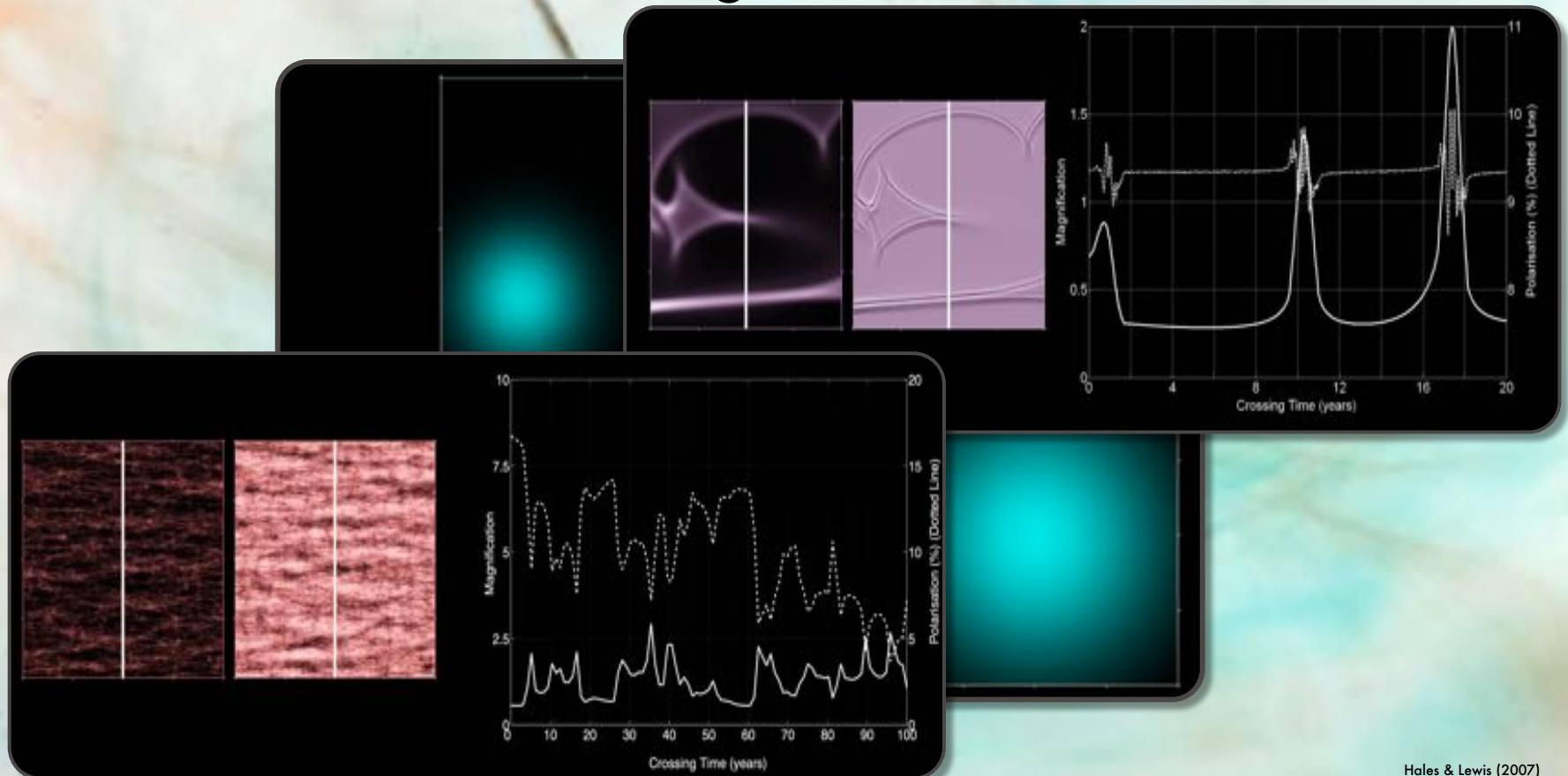
$$\mu_p(y) = \sqrt{\frac{g}{y - y_c}} H(y - y_c) + \mu_o.$$

$$\mu_{\text{mix}} = 2 \frac{\sqrt{g}}{\Delta y} (\sqrt{y_k + \Delta y} - \sqrt{y_k}) + \mu_o.$$

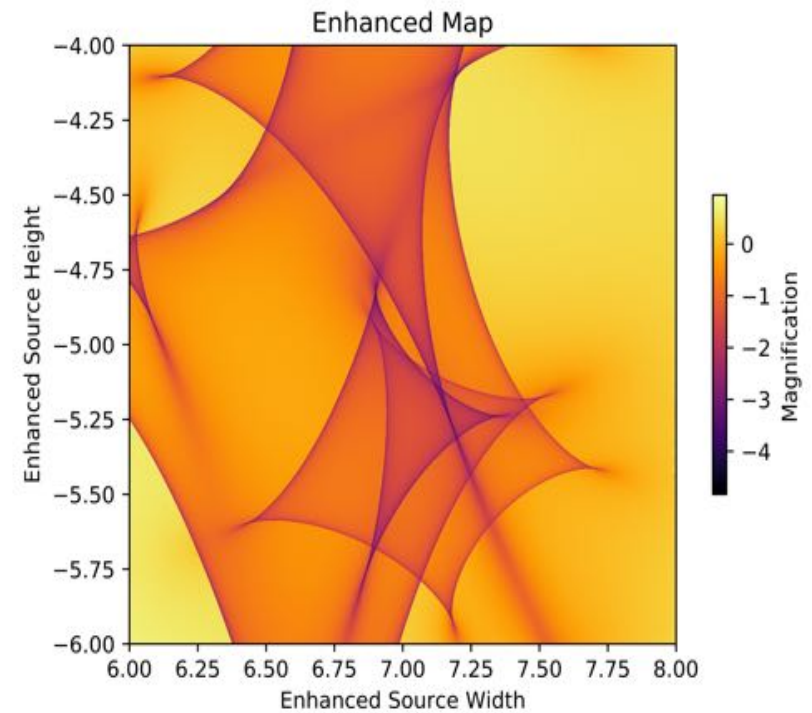
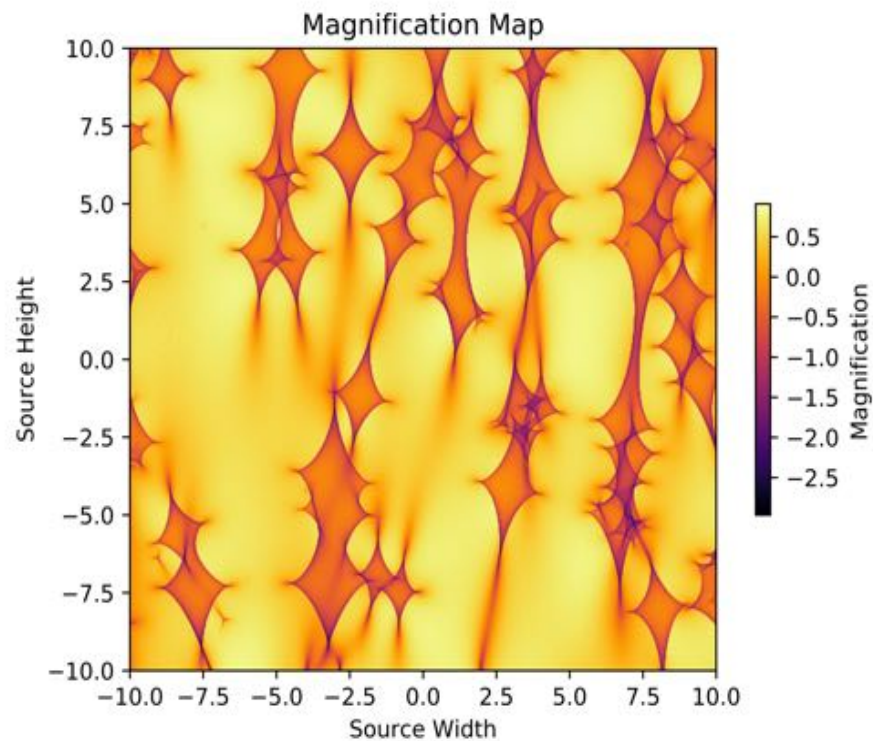
BAL Quasars: Scattering & Polarization



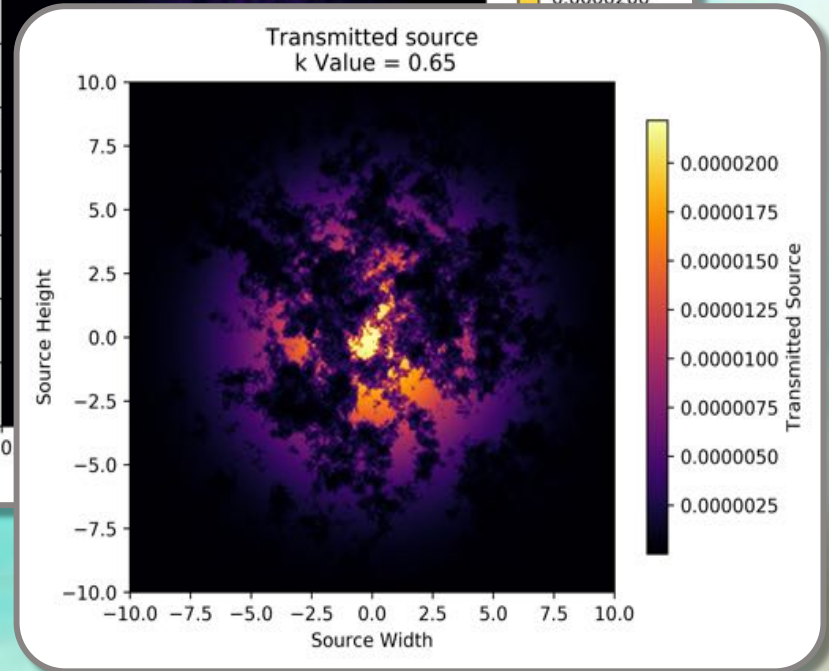
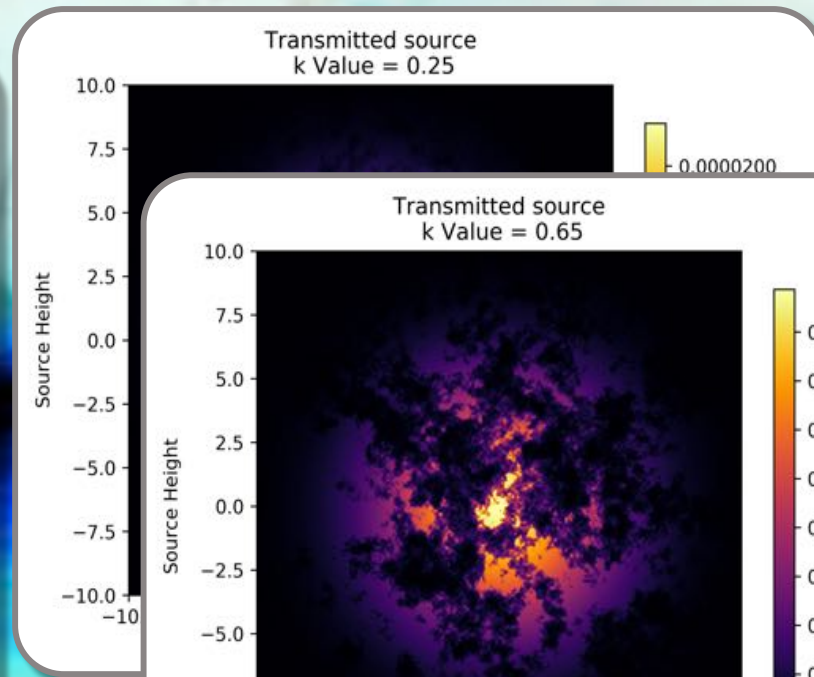
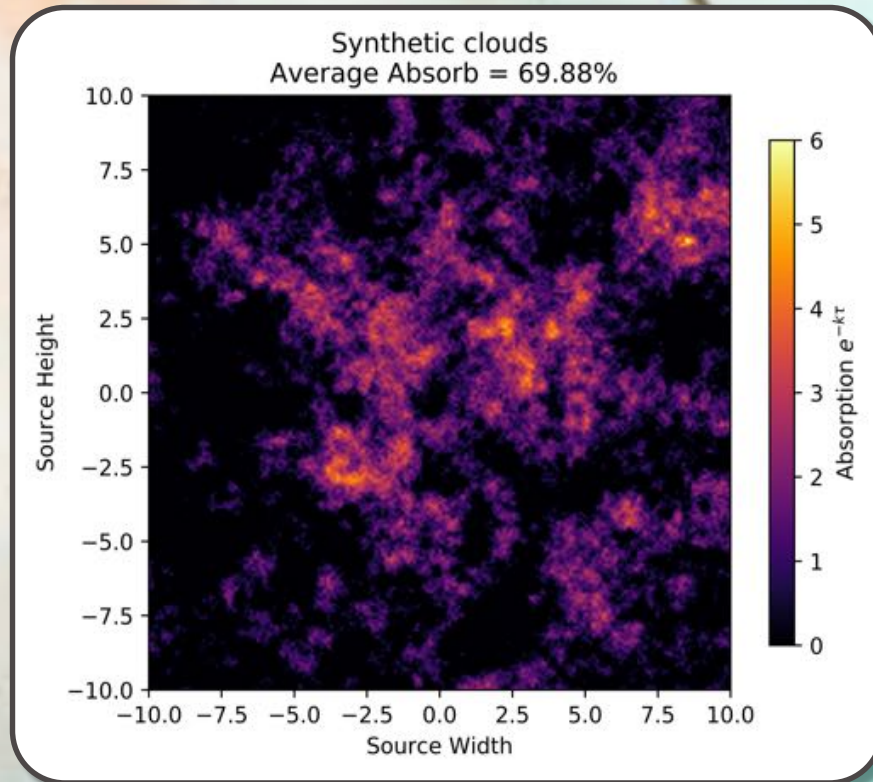
BAL Quasars: Scattering & Polarization



BAL Quasars: Zoom Simulations

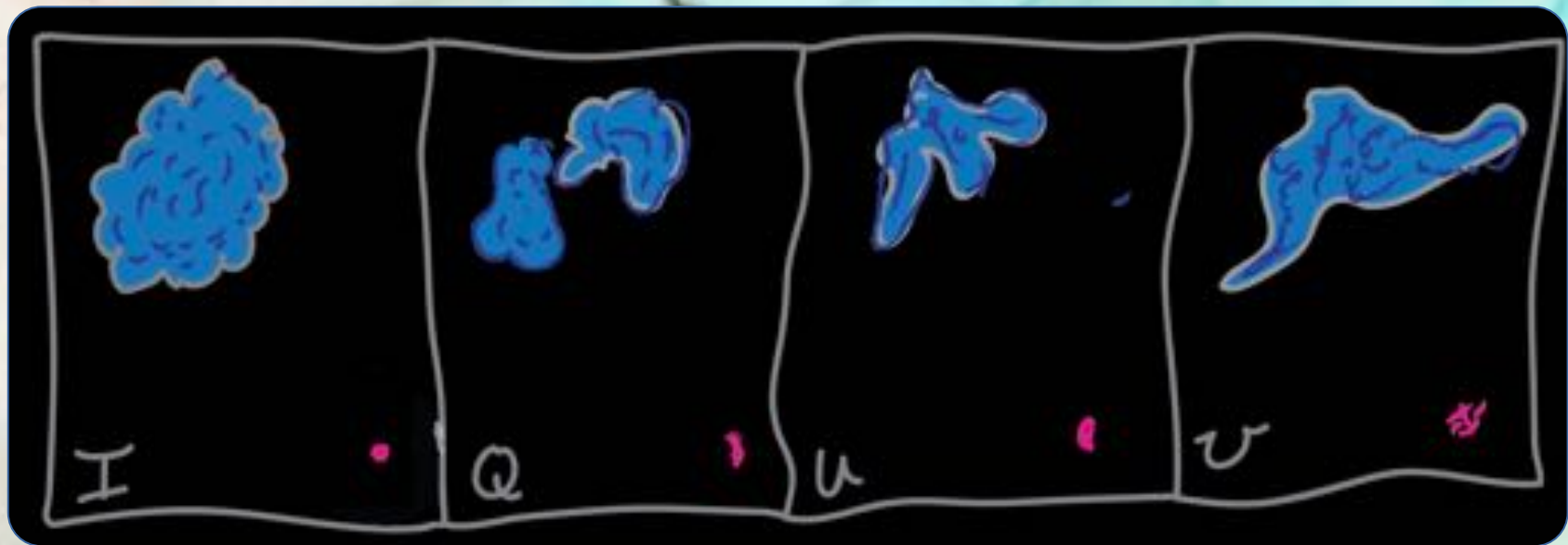


BAL Quasars: Clumpy Clouds



BAL Quasars: What's next?

Multi-scale microlensing



Multi-scale Polarization