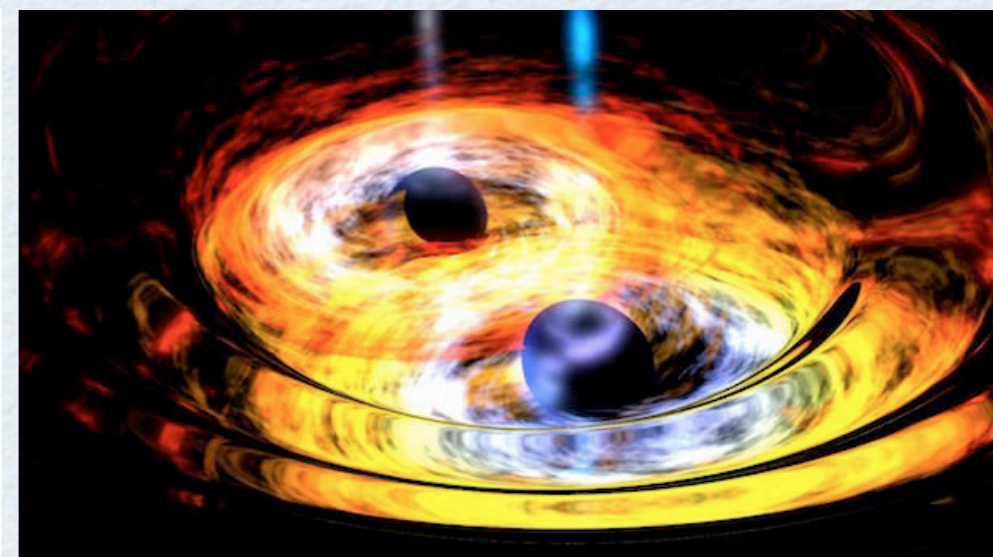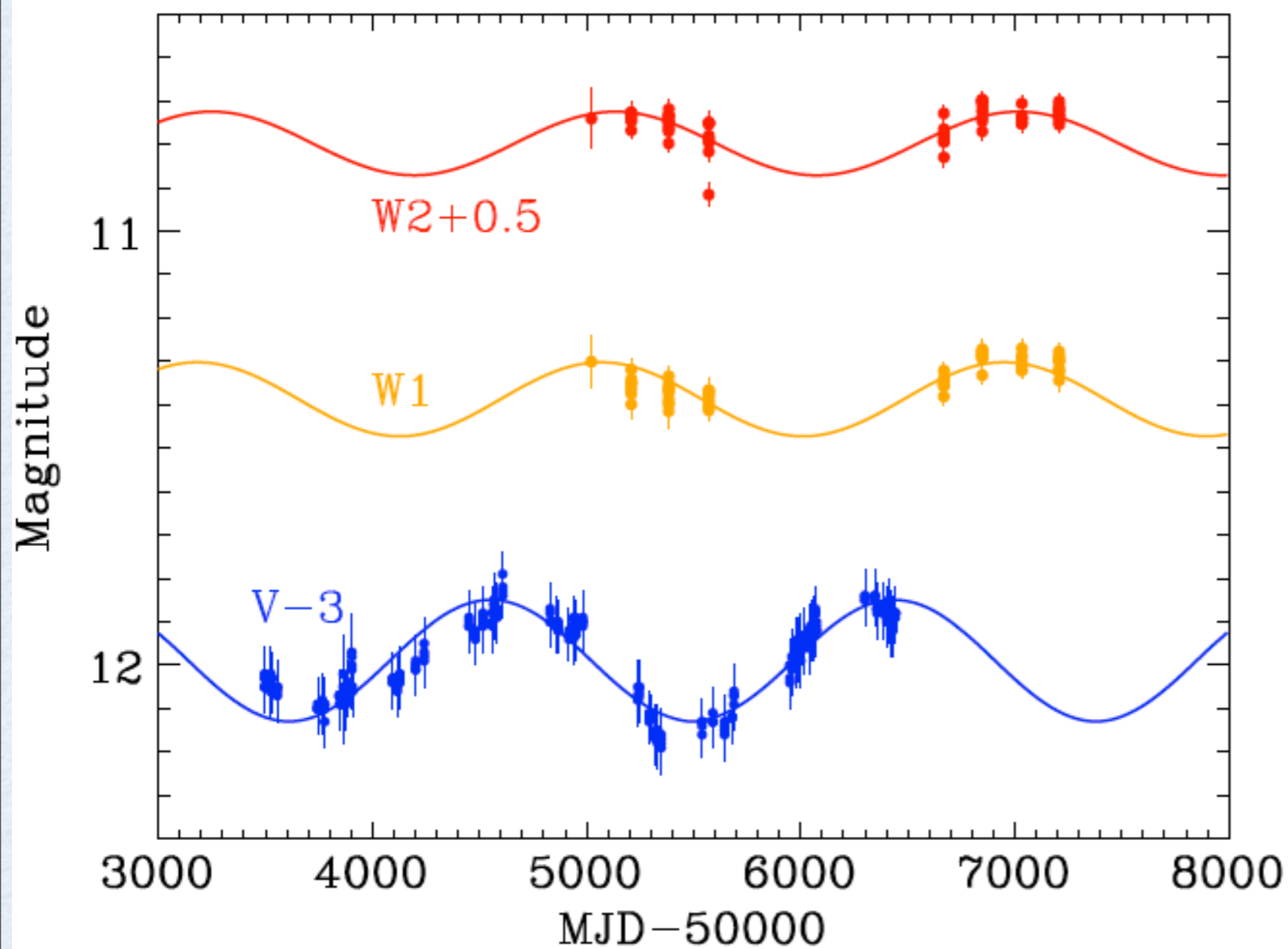# Infrared variability and time lags for periodic quasars

Hyunsung Jun (JPL/Caltech) et al.

$$\tau_{W1} = (335 \pm 153) + 1884n$$
$$\tau_{W2} = (524 \pm 148) + 1884n$$

-infinite (periodic) solutions

$$\tau = R\,(1 + \sin i)/c + T/2$$
$$R \simeq R_{sub}$$

-dust torus geometry

left: CRTS (blue), WISE (yellow/red) light curves for PG1302-102, right: binary SMBH (credit: NASA)

-110 light curves to come