A corresponding states scenario for molecular models of water

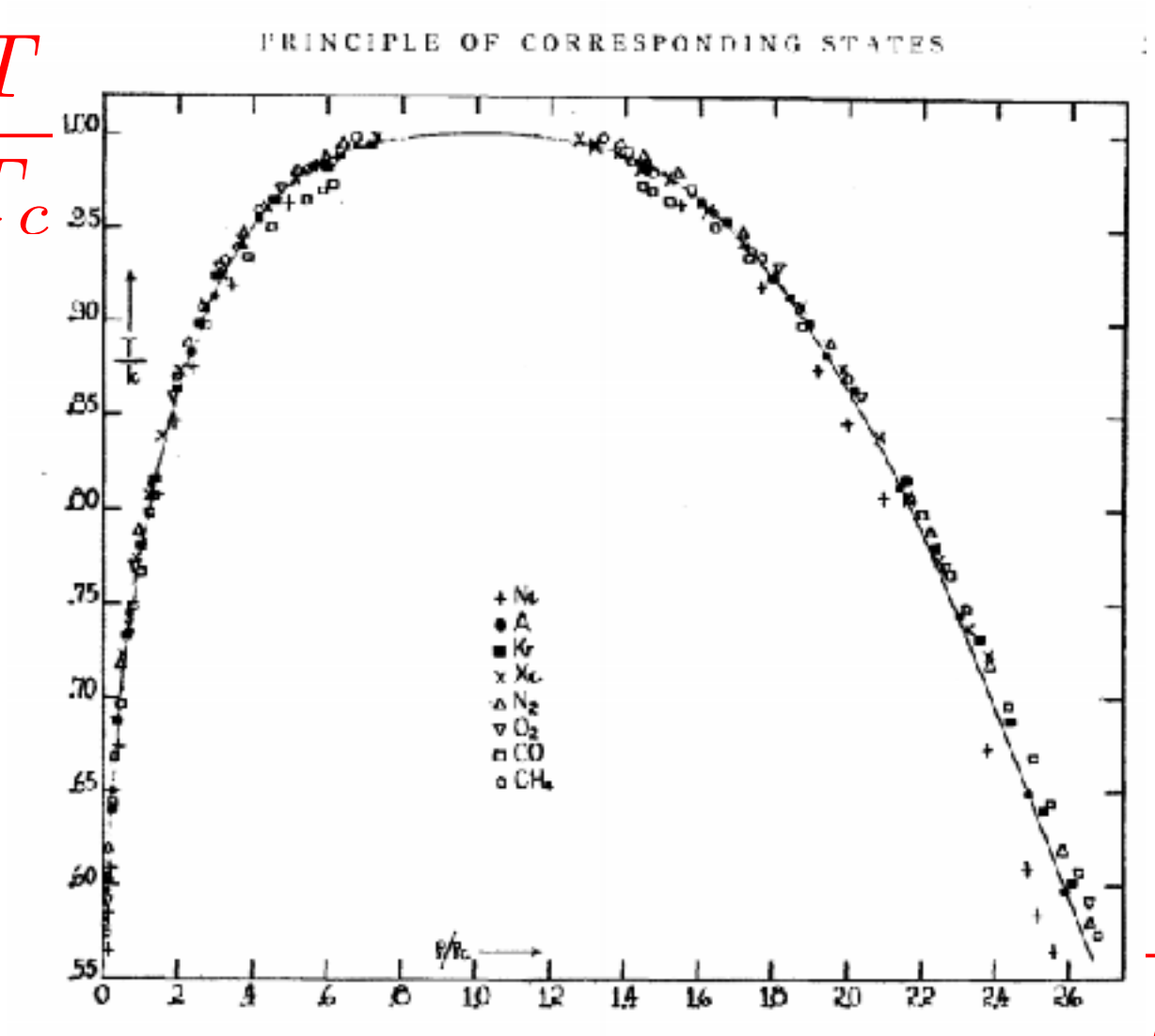
Folarin Latinwo[(a)]

Mikhail Anisimov Princeton Visit, 2017

The Principle of Corresponding States

E. A. Guggenheim, J. Chem. Phys. **13,** (7), 1945

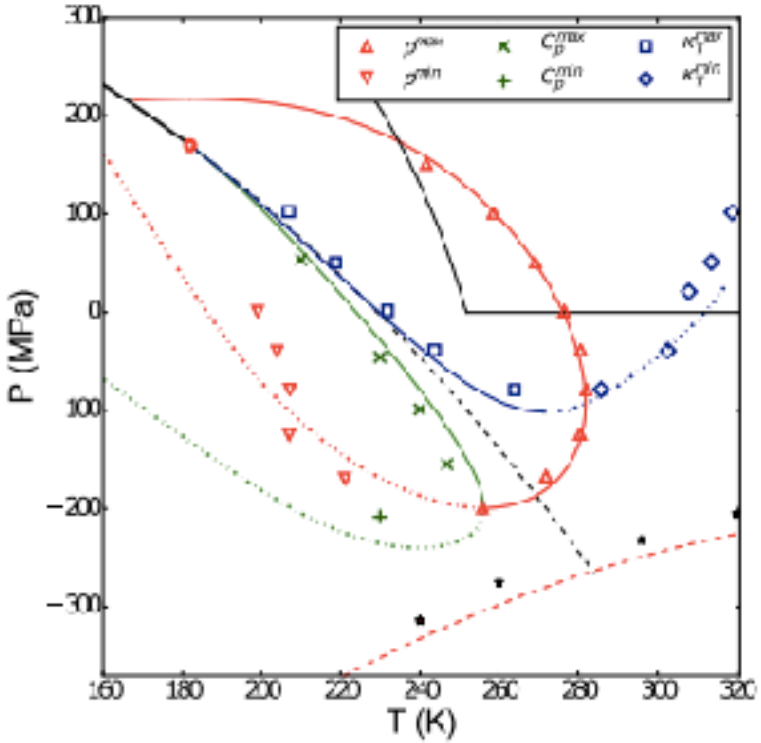
$\frac{T}{T_c}$



$\frac{\rho}{\rho_c}$

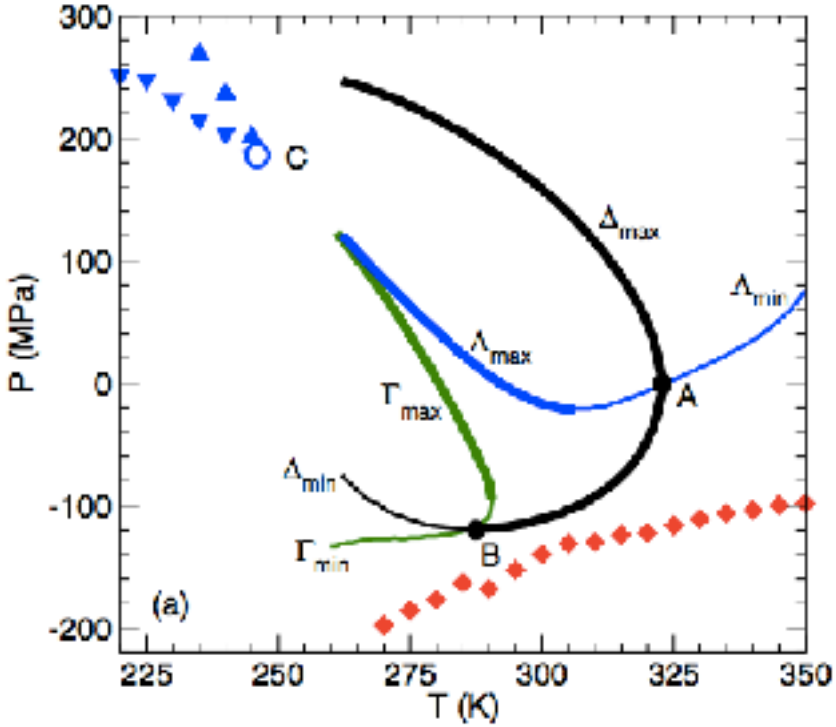
Features of supercooled molecular models of water

TIP4P2005



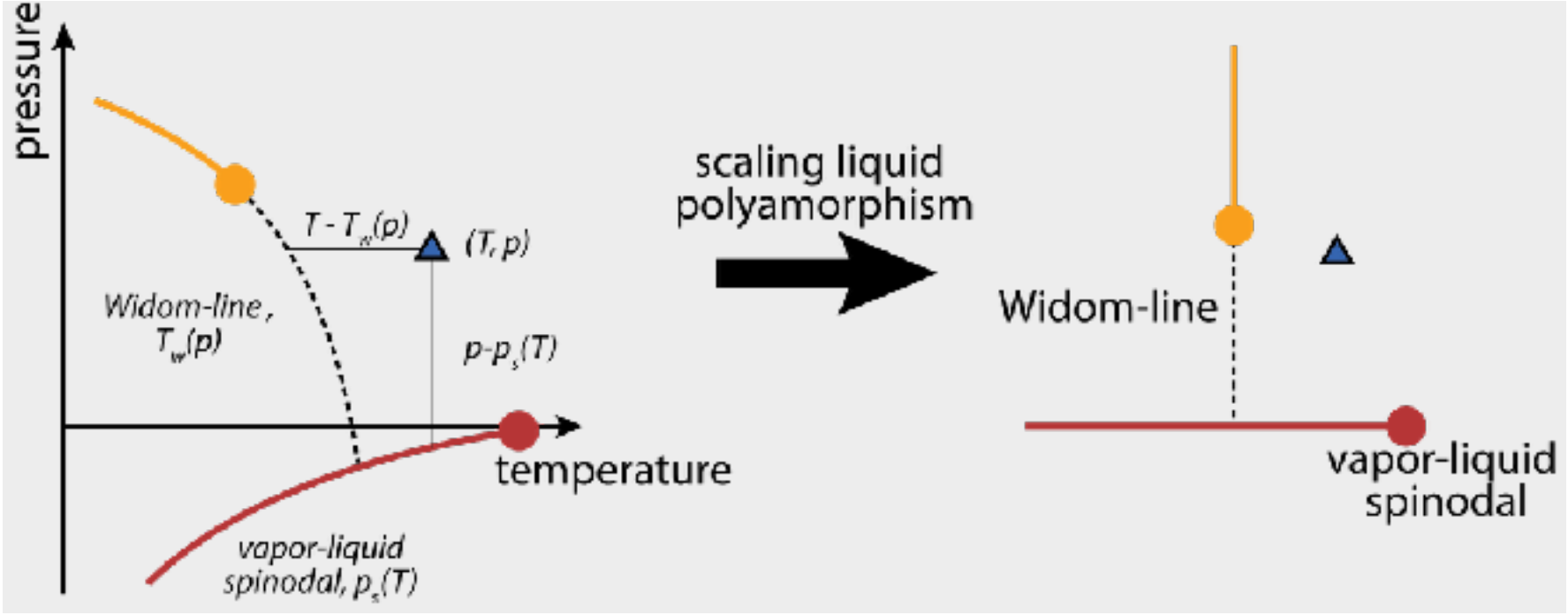
J. Biddle et al., to appear in 2017.

ST2 (RF)

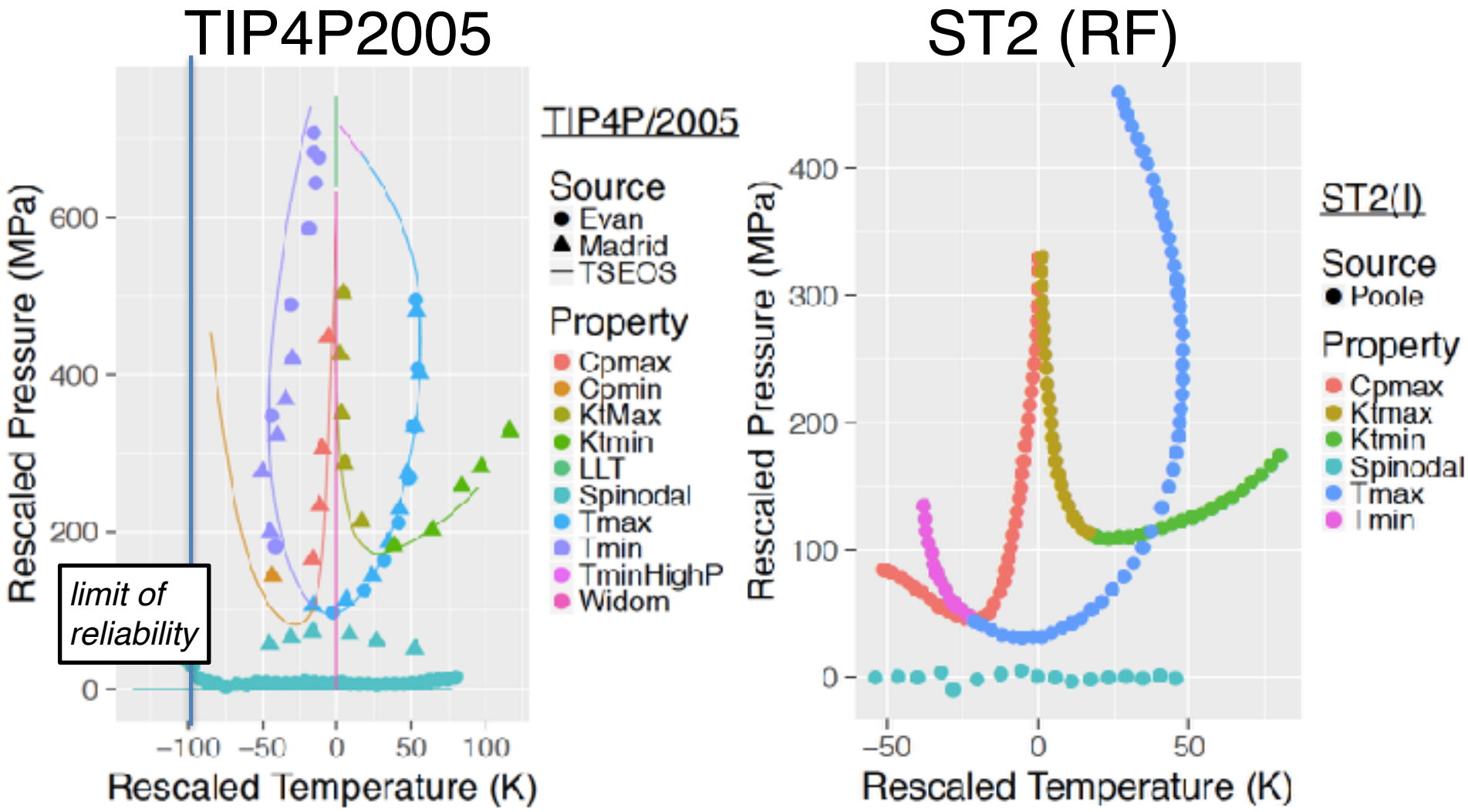


PH Poole, , I. Saika-Void, F. Sciortino, J. Phys.: Condens. Matter **17,** (2005), 1945

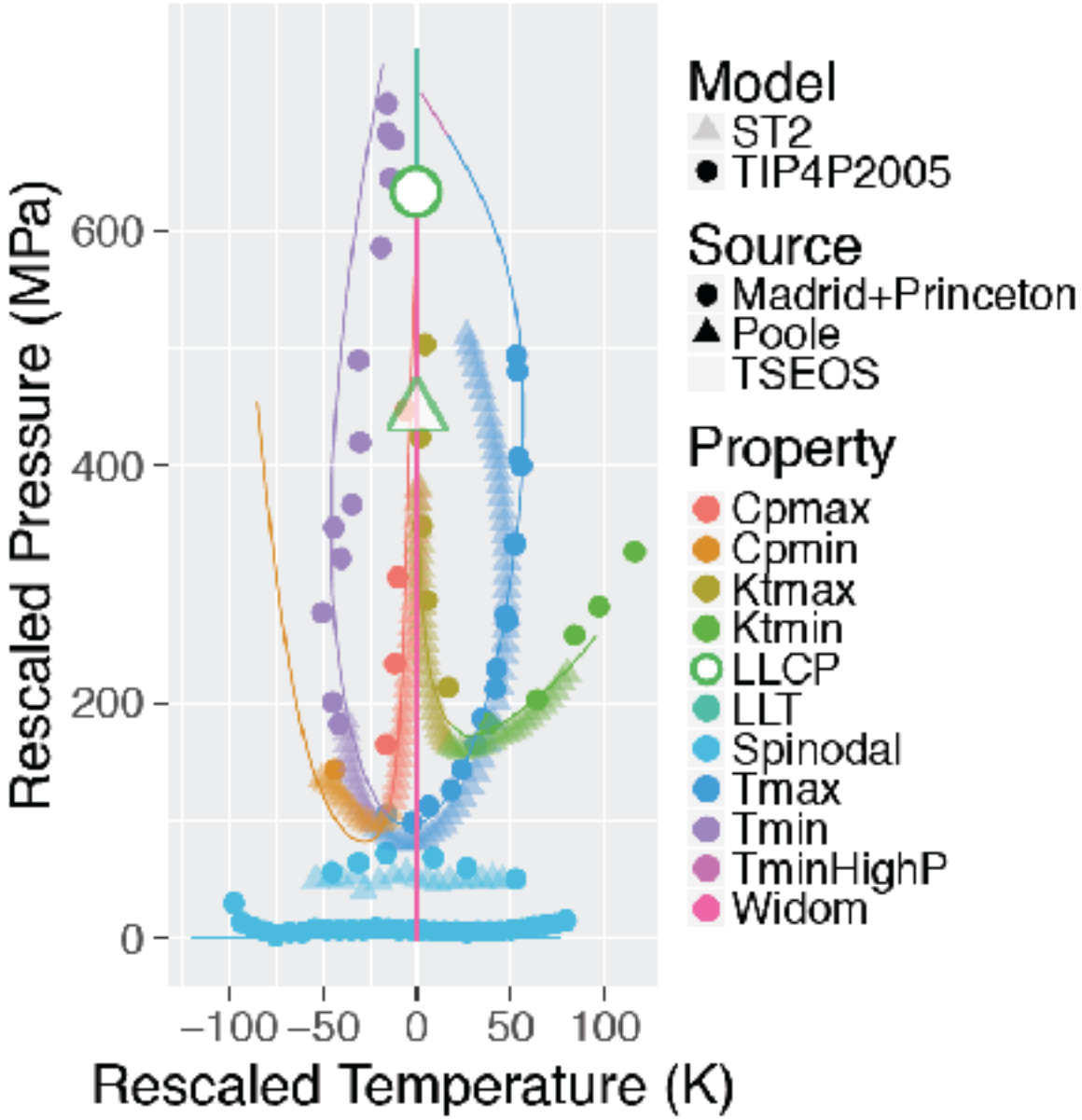
“Corresponding states” approach for liquid polyamorphism



“Corresponding states” approach for molecular models of water

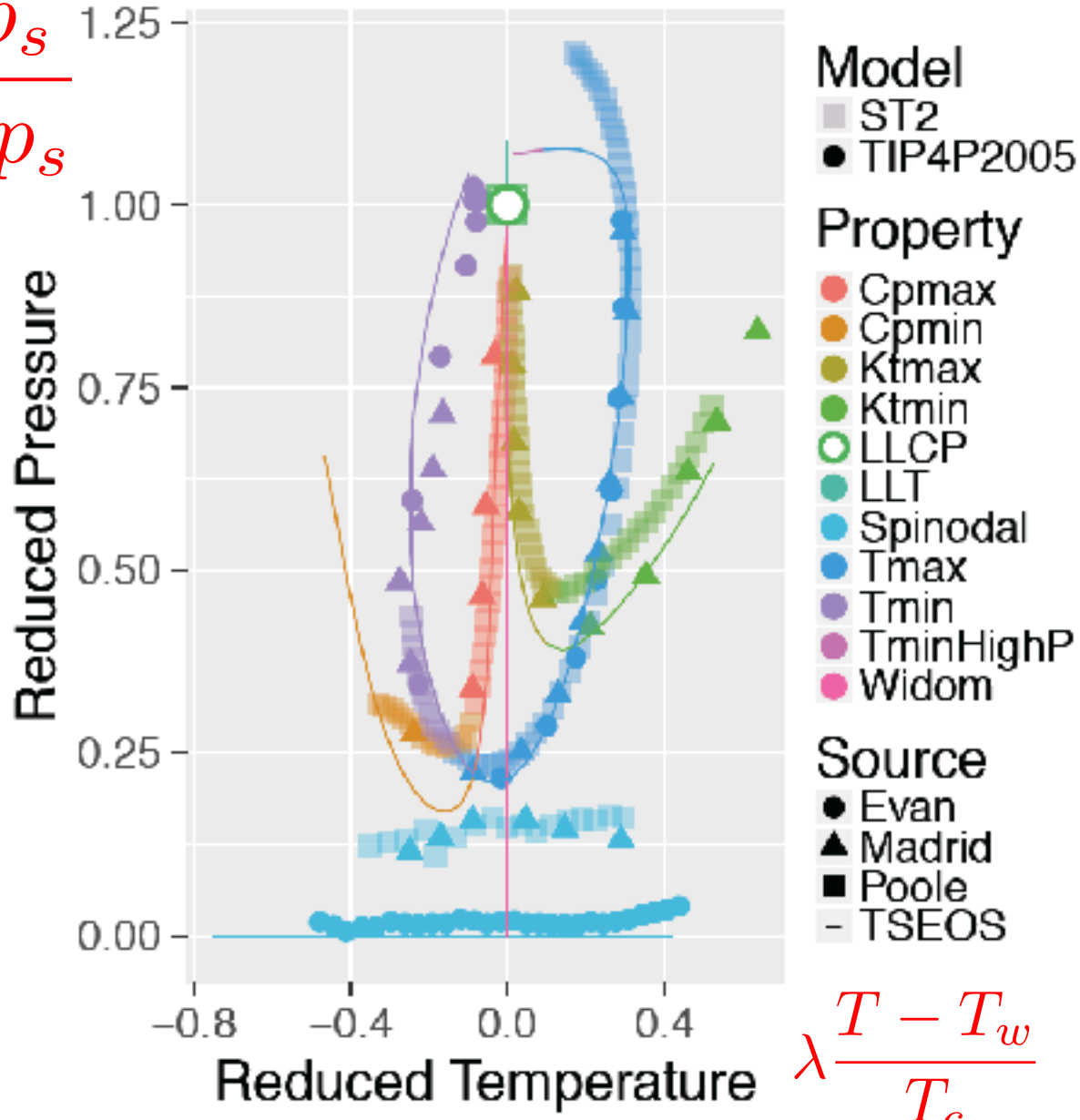


“Corresponding states” picture



“Zeroing” the critical point

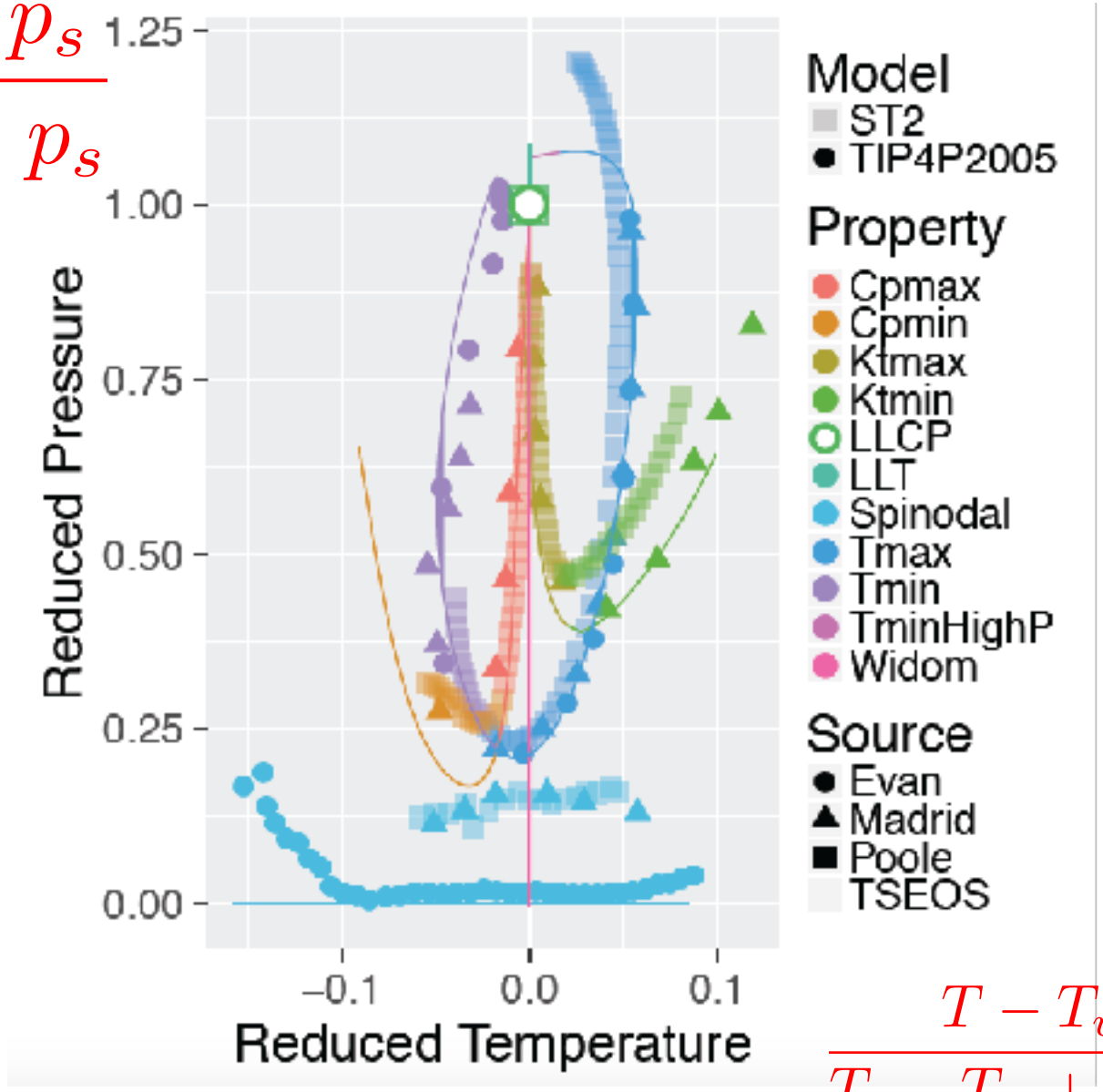
$$\frac{p - p_s}{p_c - p_s}$$



$$\lambda \frac{T - T_w}{T_c}$$

“Zeroing” the critical point

$$\frac{p - p_s}{p_c - p_s}$$



$$\frac{T - T_w}{T_c - T_w + 1000.}$$

To come, TIP5P