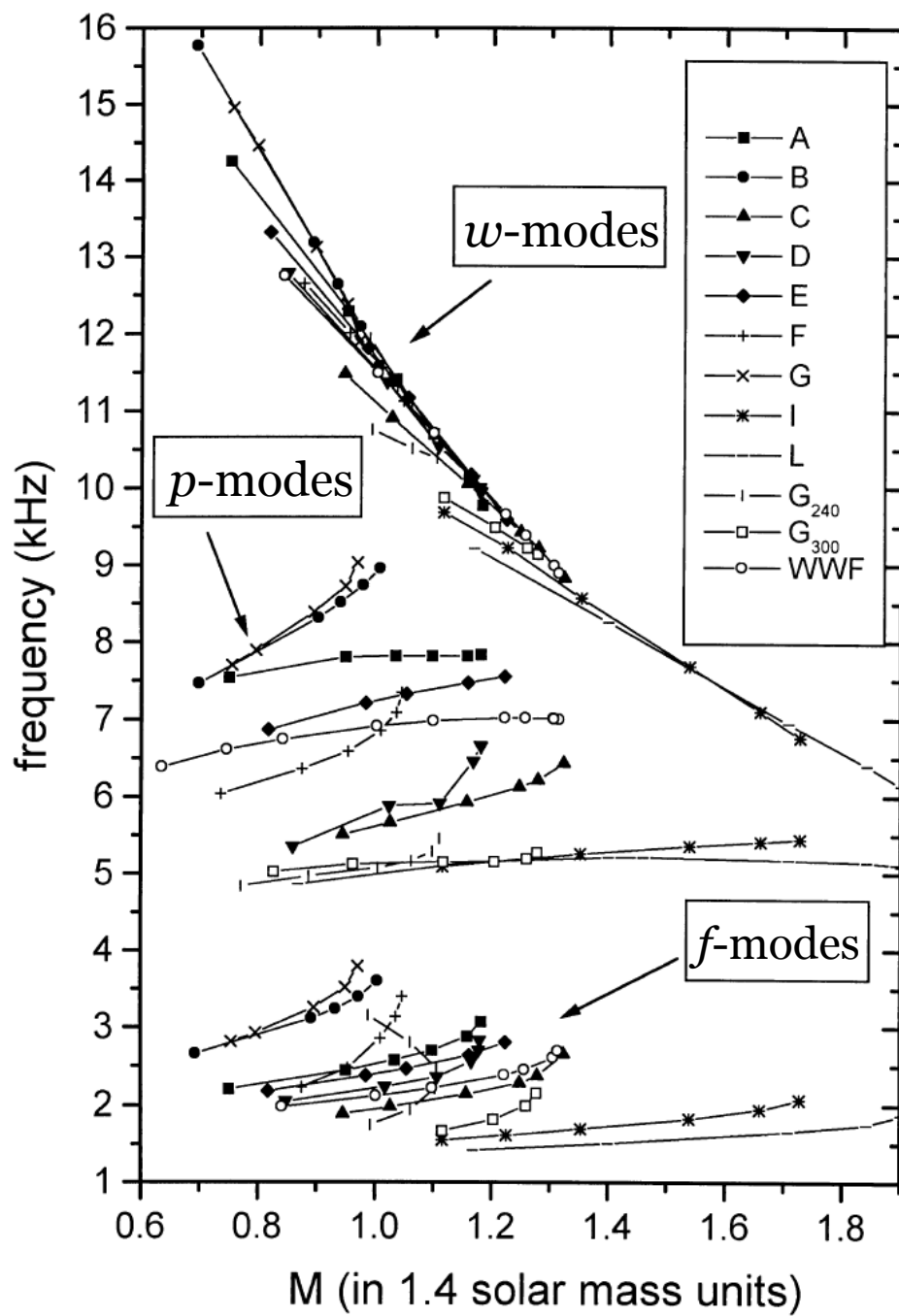


Overview of the frequencies of quasi-normal modes

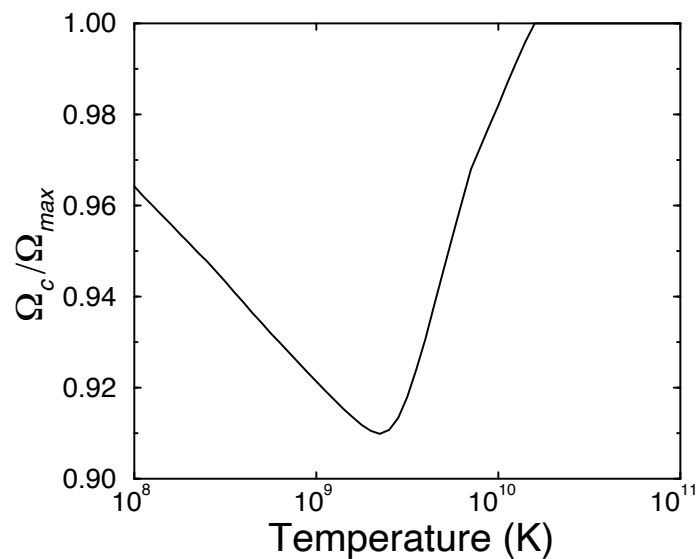


Stability of Quasi-Normal Modes

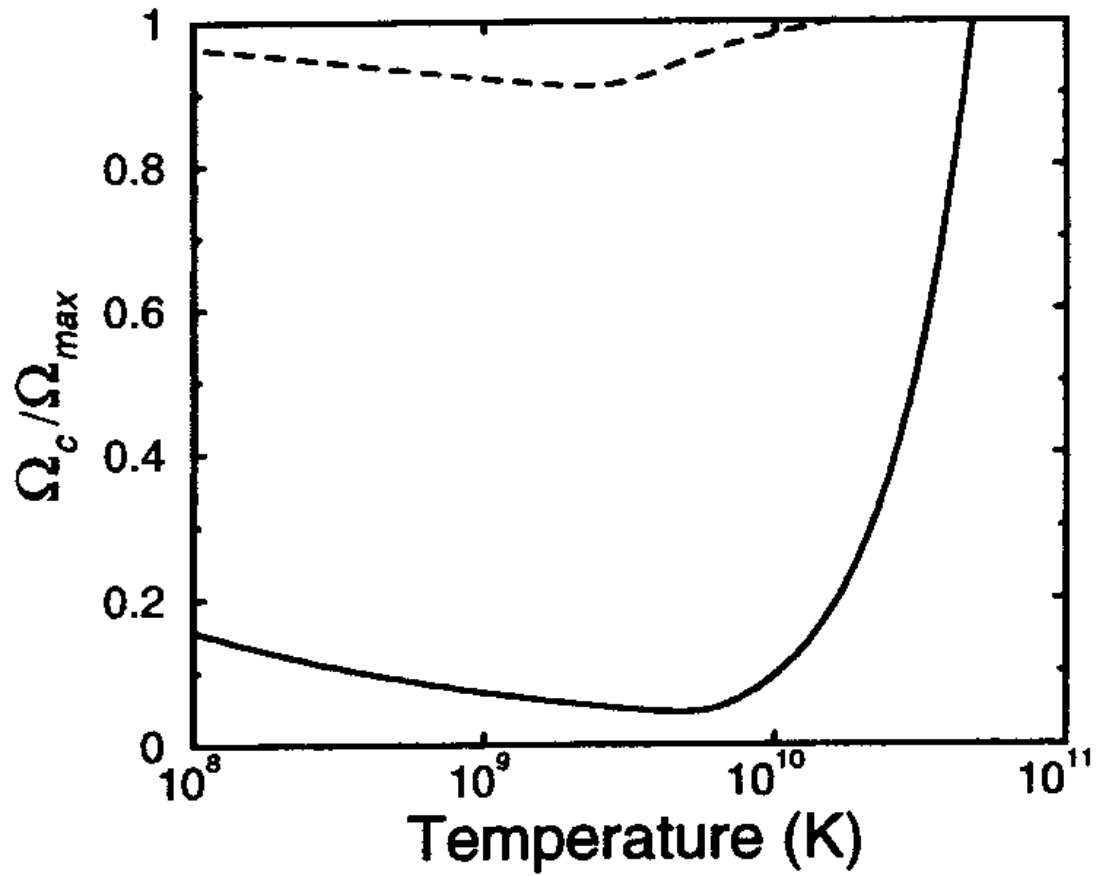


A counter-rotating mode (solid curve) that is dragged forward by the rotation of the background star (dashed curve) is driven unstable by the emission of gravitational radiation

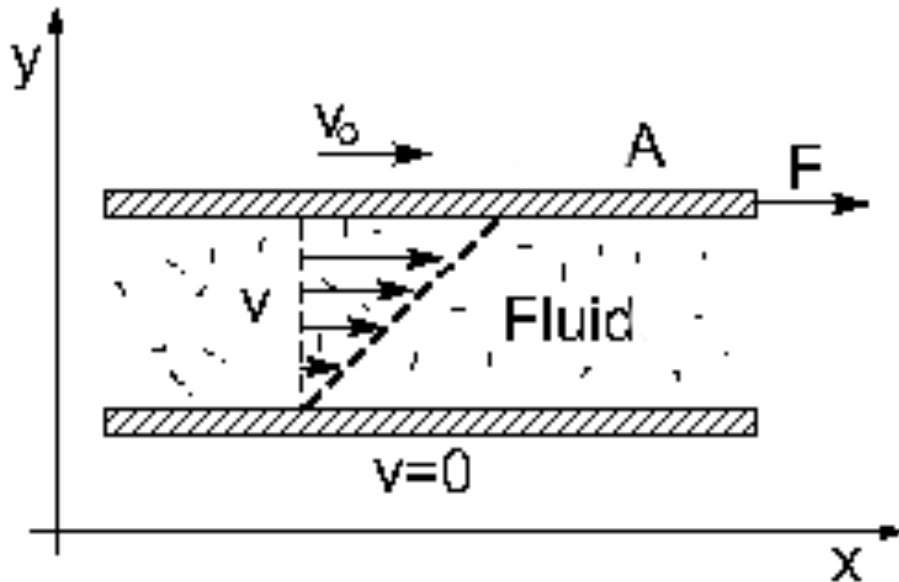
T-dependence of the critical angular velocity for the *f*-mode instability



T-dependence of the critical angular velocity for the *r*-mode instability

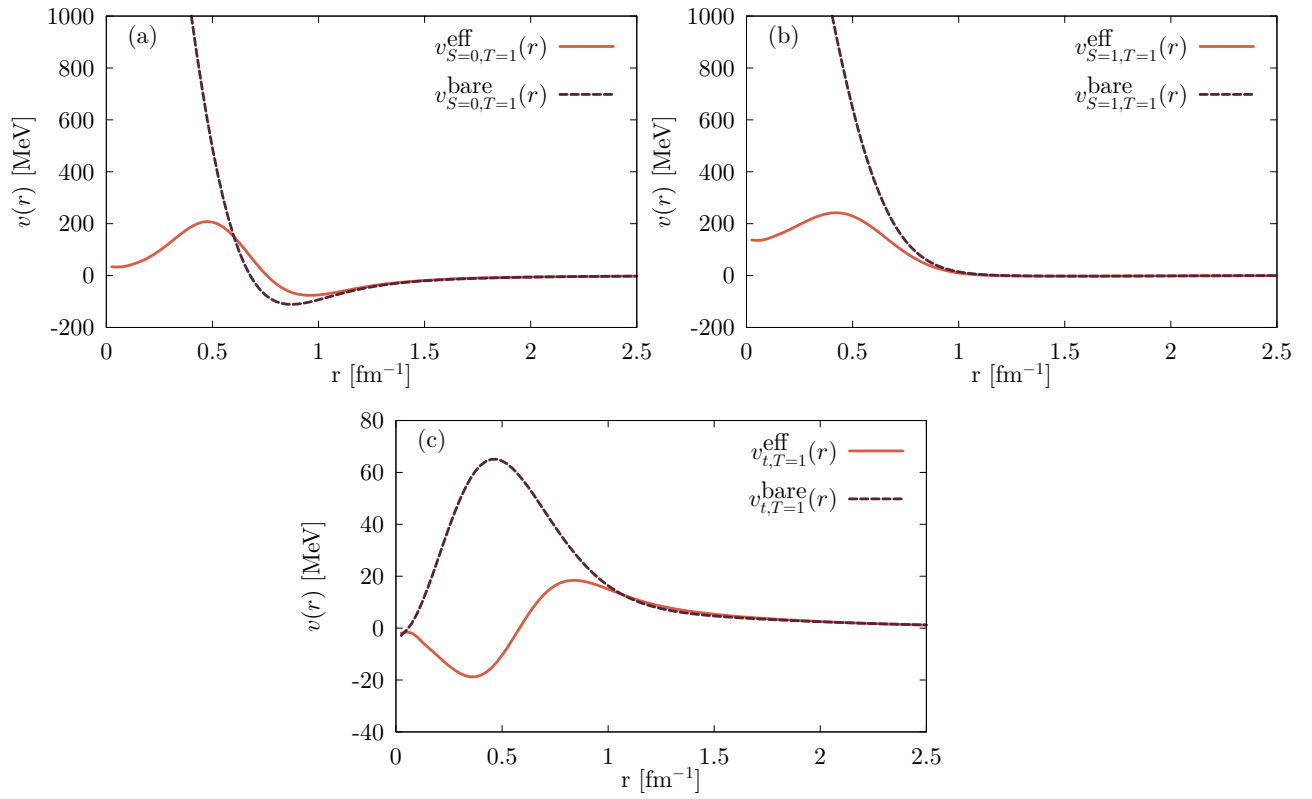


Macroscopic definition of viscosity:
Viscous drag between parallel solid surfaces in a fluid

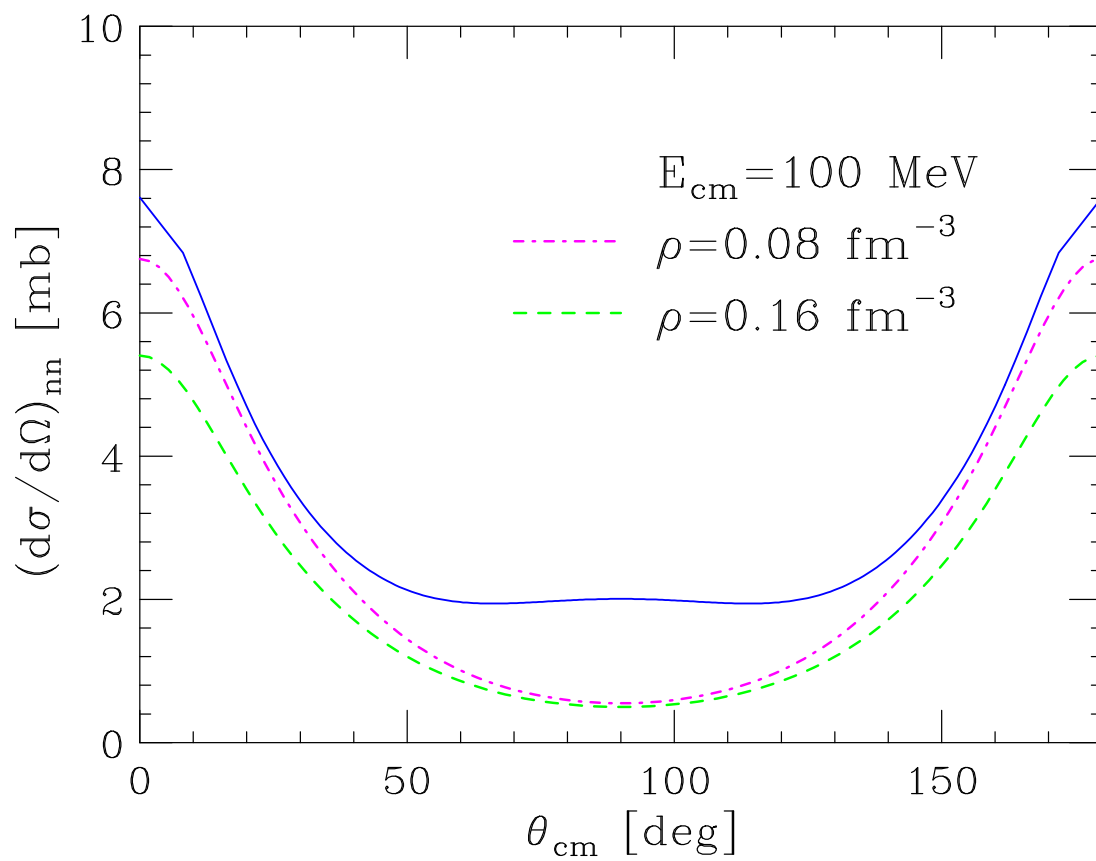


$$\frac{F}{A} = \eta \frac{v_0}{d} .$$

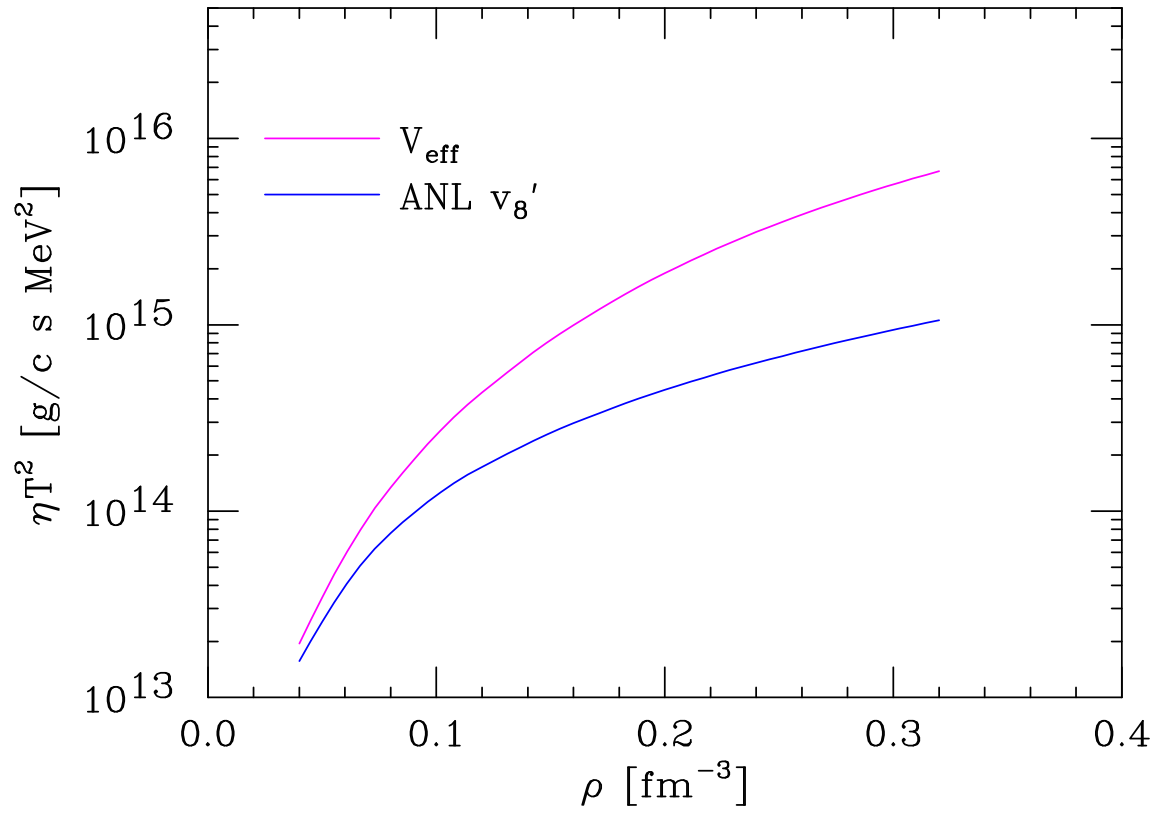
Effective interaction



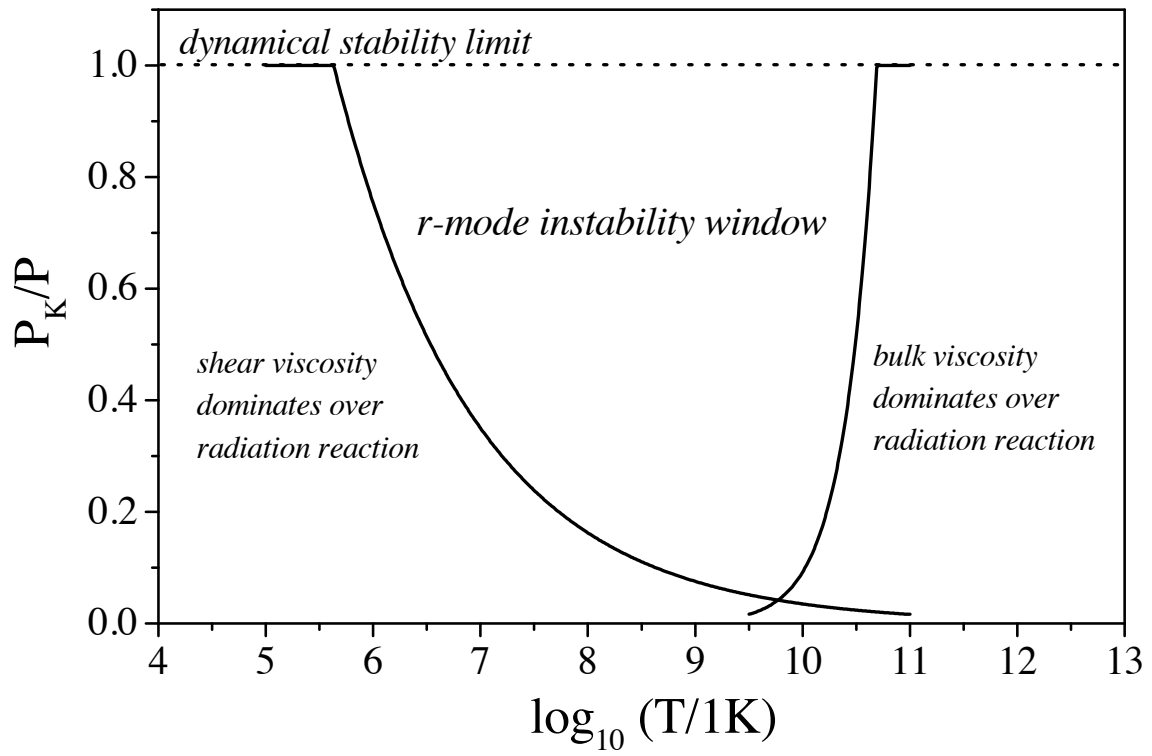
In-medium cross section



Shear viscosity of neutron matter



r-mode stability window



Superfluid gap in neutron matter

