Fluid mechanics of kidney stone removal Camera $\rho \left(\frac{\partial \mathbf{u}}{\partial t} + (\mathbf{u} \cdot \nabla) \mathbf{u} \right) = -\nabla p + \mu \nabla^2 \mathbf{u}$ Hydrostatic pressure $\nabla \cdot \mathbf{u} = 0$ Working channel Flow Kidney 2.6 2.4 2.2 Flux 0.31.8 (i)(iii)1.6 0.3(iii)1.4 0.2 0.40.8 0 0.6 A mathematician's kidney **Eccentricity**