## Refractive index of a metal vapor

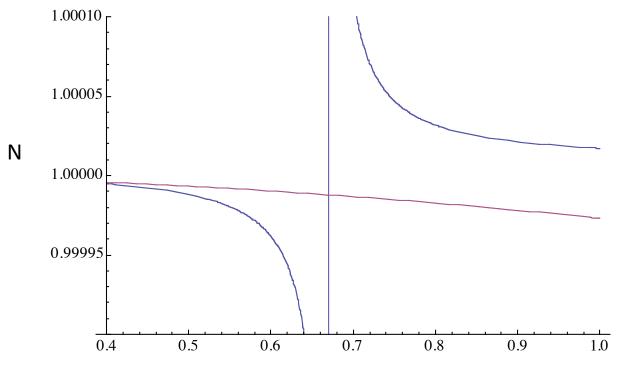
For a metal vapor near atomic resonance

N = 1+ 
$$X_a/2$$
 = 1 +  $(n_a r_e/2\pi)$  f /  $(1/\lambda_r^2 - 1/\lambda^2)$ 

For Lithium

$$\lambda_r = .670 \text{ um}$$

$$f = .744$$



Wavelength in um