Have you ever wanted to

Work for NASA?

Come to the

NASA Langley Information Session

and hear about their internship programs from past participants!

Thursday, October 4, 5:30 – 6:30

Cohen Career Center
Presentation Rooms A&B

http://tinyurl.com/NASALangleyInfo
dlsnyder@ wm.edu

Science Careers in the Intelligence Community
Tuesday, October 9, 5:30pm
Cohen Career Center

Science plays a critical part in the agencies that make up the intelligence community.

Representatives from the **Drug Enforcement Agency**, **National Security Agency**, and **Federal Bureau of Investigation** will highlight their organizations and positions, as well as science and technology career paths.

Register to attend at http://tinyurl.com/sciintelligence

Fresnel Equations

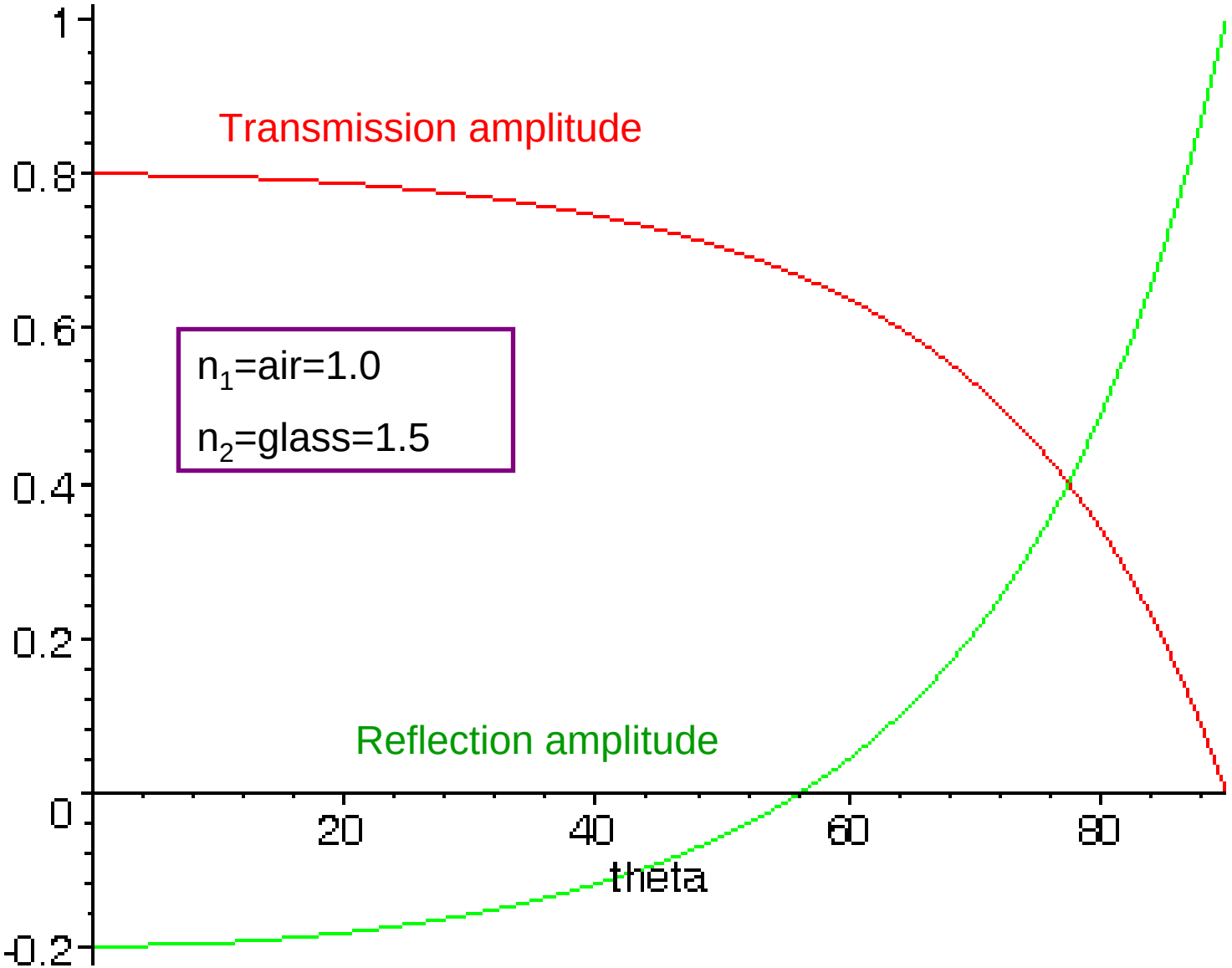
Transmission Amplitude:

$$t = \frac{2}{\frac{\sqrt{1-\left(\frac{n_1}{n_2}\right)^2 \sin^2\theta_i}}{\cos\theta_i} + \frac{n_2}{n_1}}$$

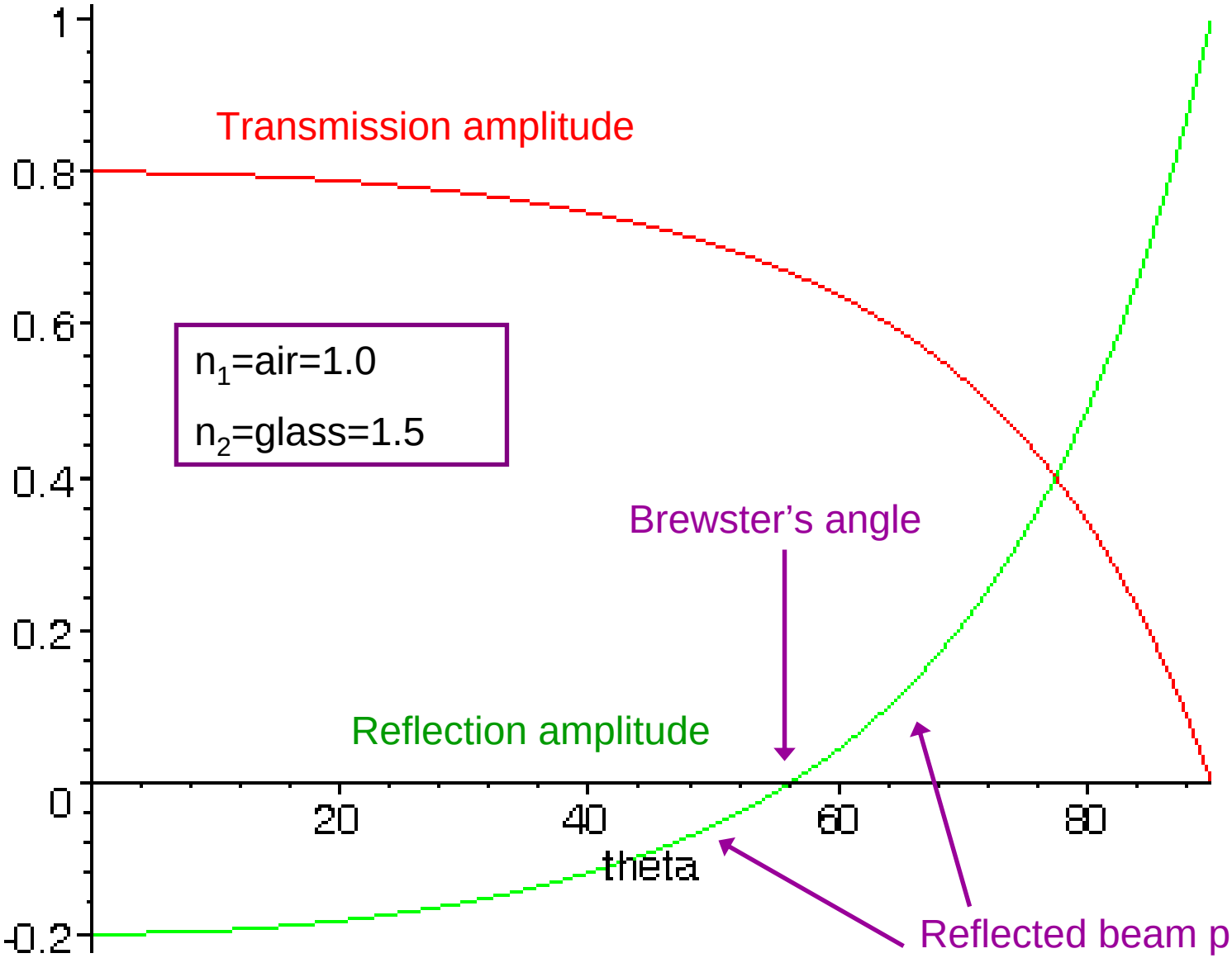
Reflection Amplitude:

$$r = \frac{\frac{\sqrt{1-\left(\frac{n_1}{n_2}\right)^2 \sin^2\theta_i}}{\cos\theta_i} - \frac{n_2}{n_1}}{\frac{\sqrt{1-\left(\frac{n_1}{n_2}\right)^2 \sin^2\theta_i}}{\cos\theta_i} + \frac{n_2}{n_1}}$$

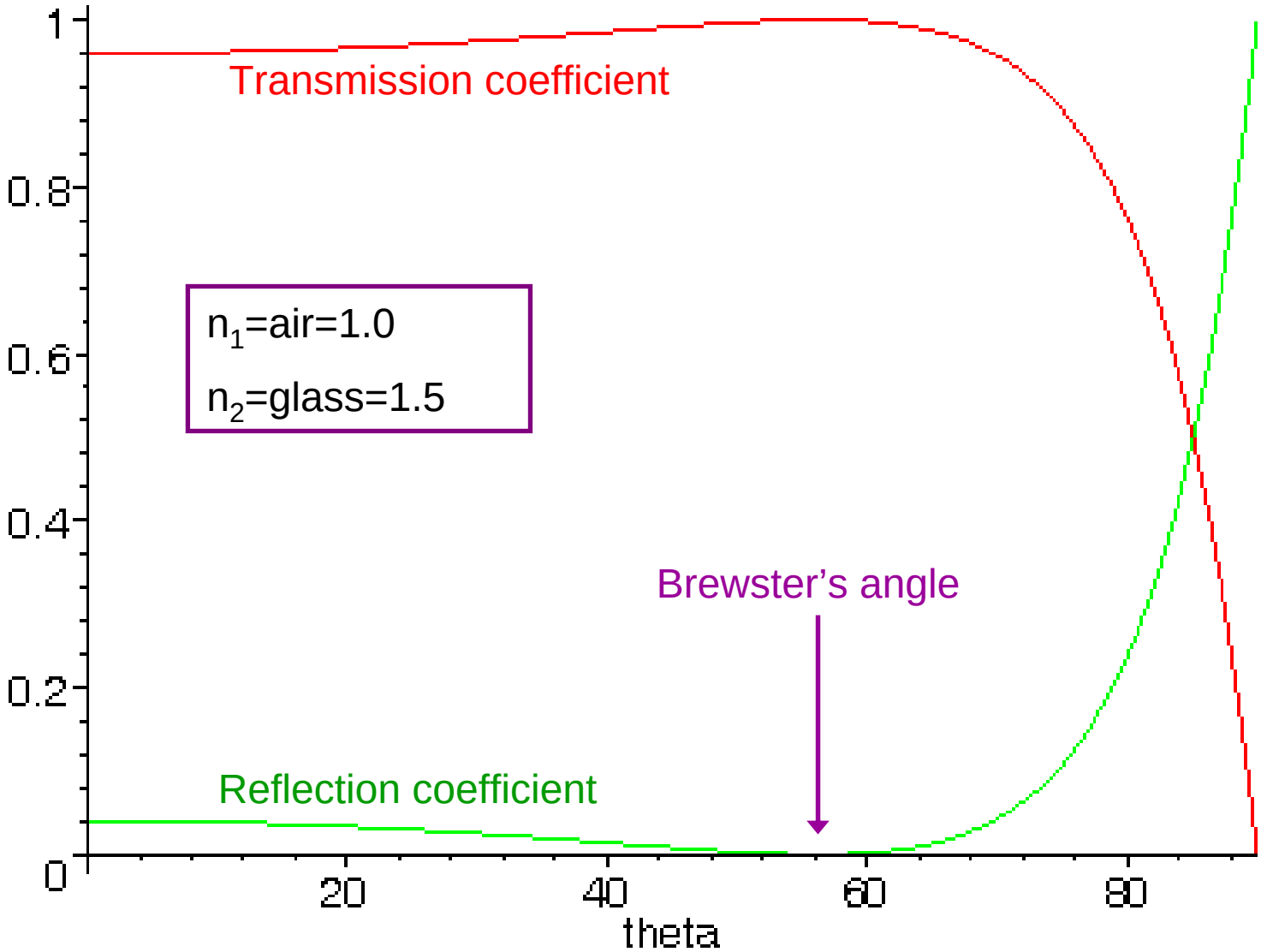
P-polarized light on Glass, n_2=1.5



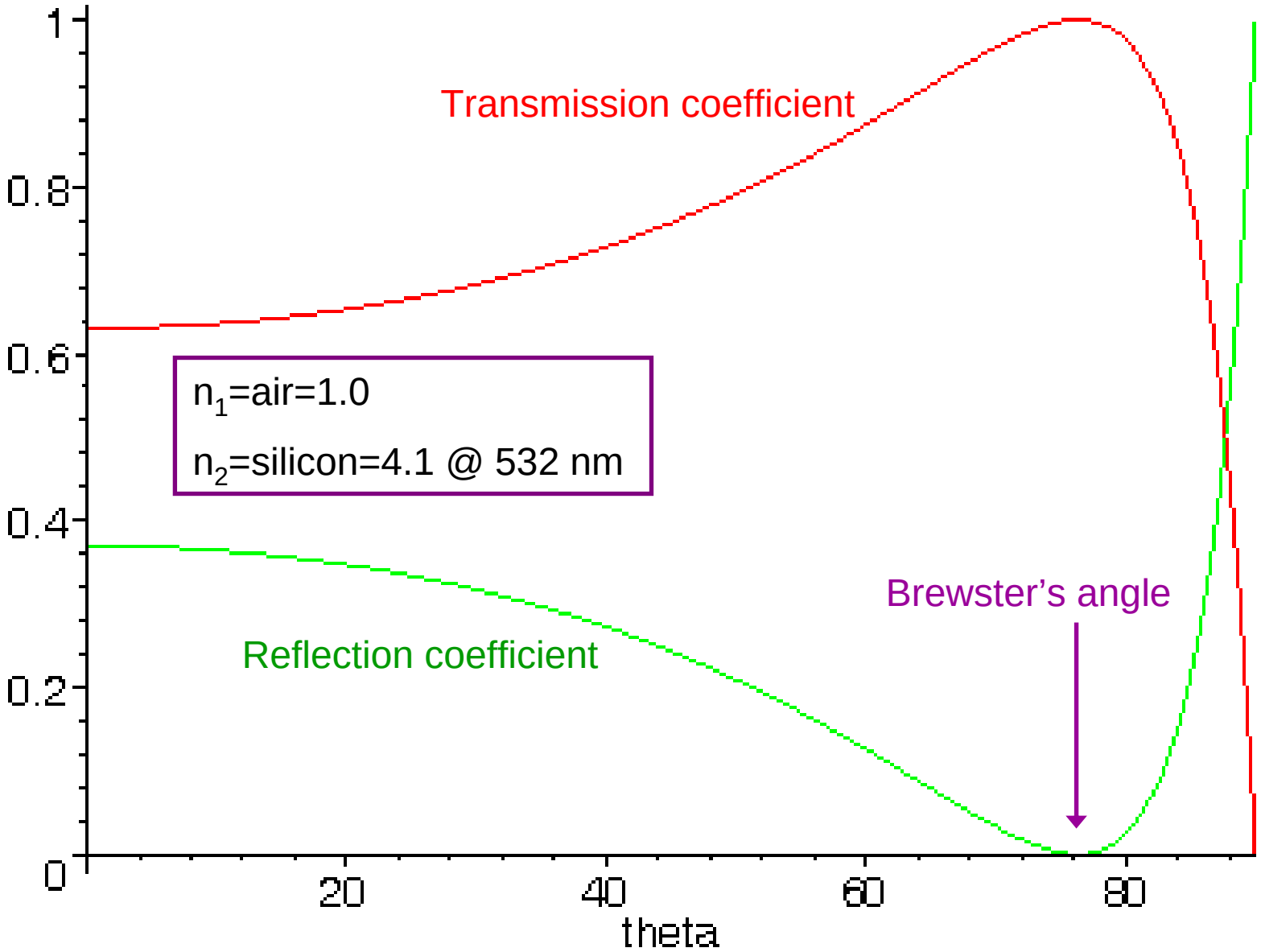
P-polarized light on Glass, n_2=1.5



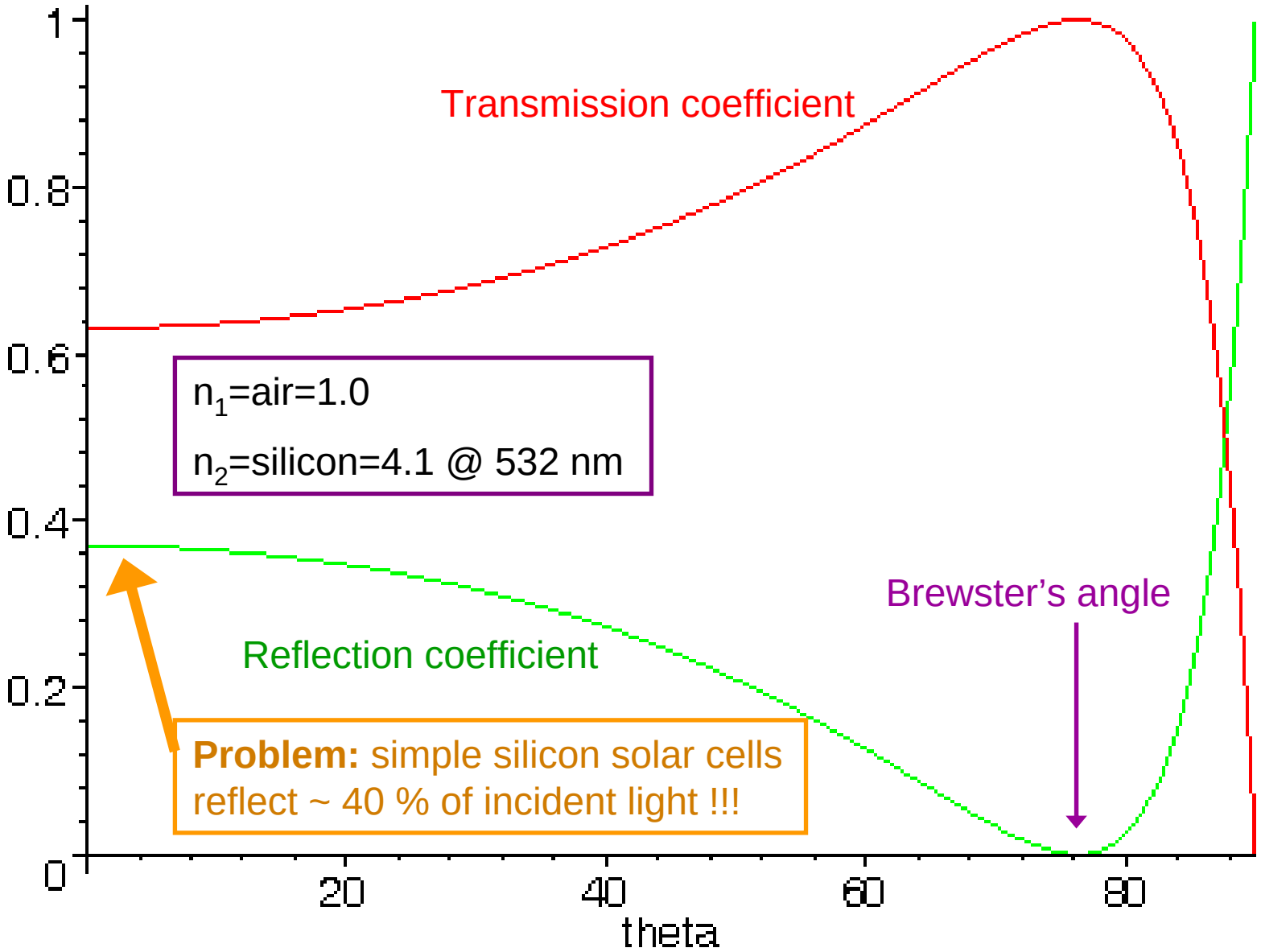
Glass: n_2=1.5


1
0.8
0.6
0.4
0.2
0
20
40
60
80
theta
Transmission coefficient
Reflection coefficient
n1=air=1.0
n2=glass=1.5
Brewster's angle

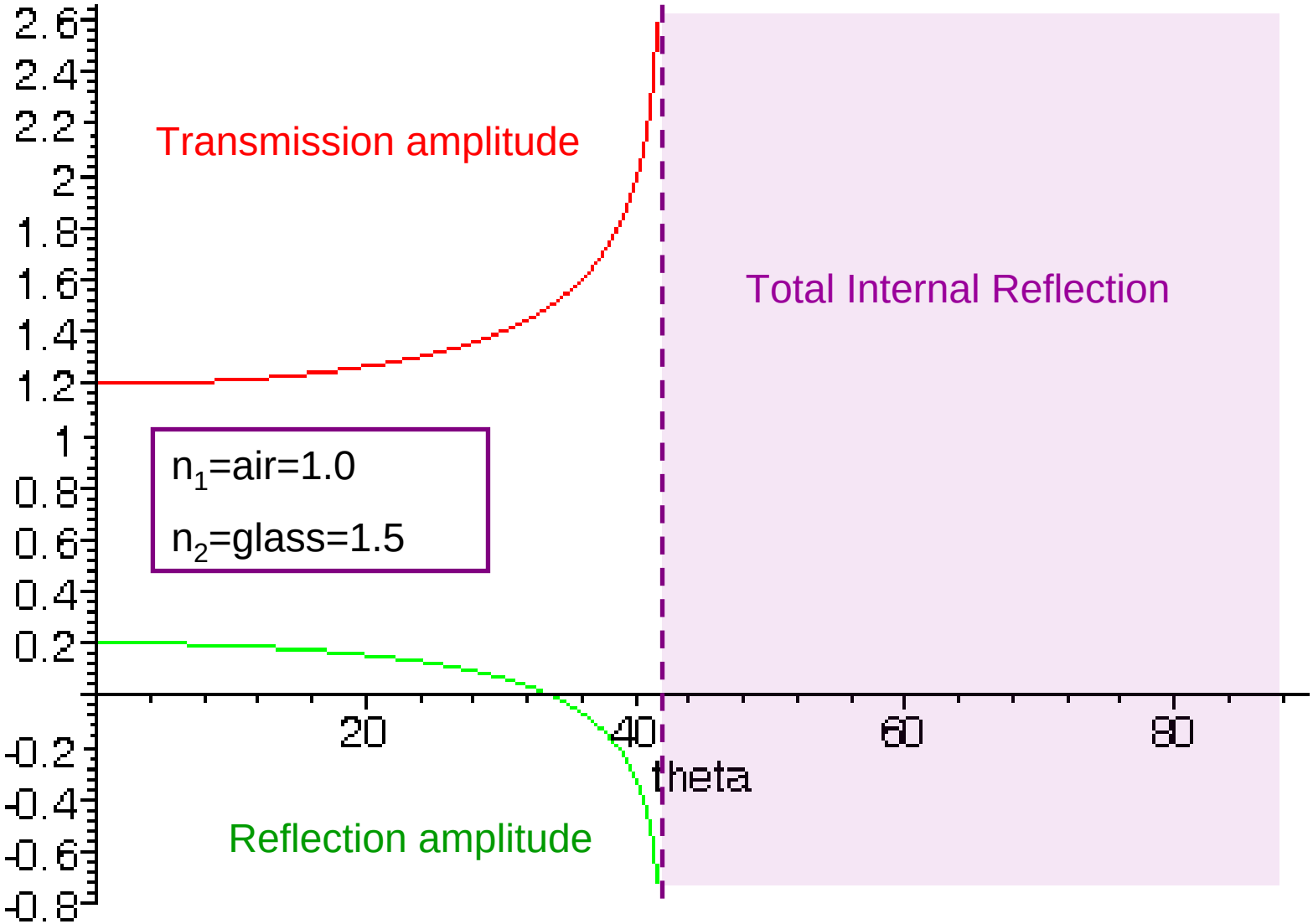
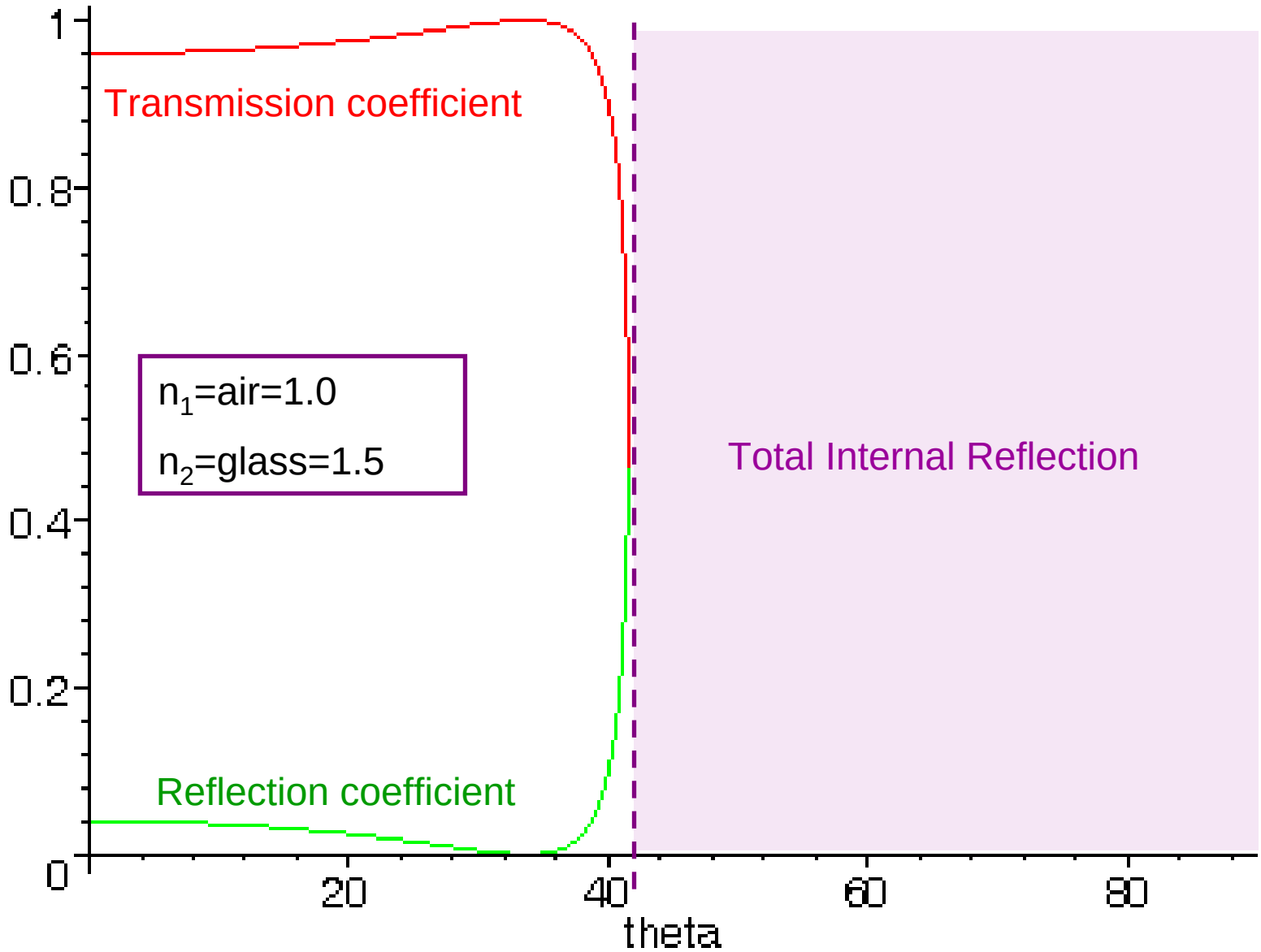
Silicon: n_2=4.1



Silicon: n_2=4.1



Total internal reflection: Glass: n_2=1.5



Total internal reflection: Glass: n_2=1.5