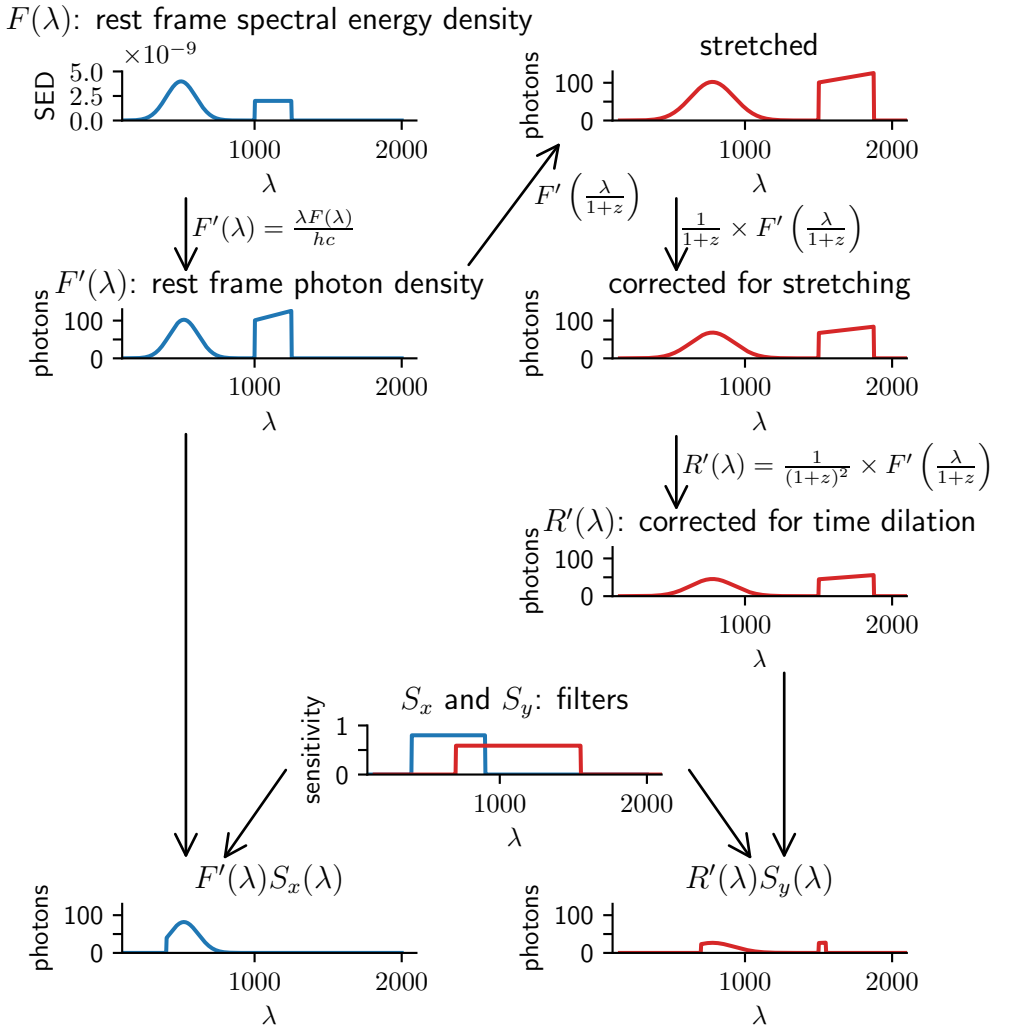
Calculating $\frac{\mathcal{F}_x}{\mathcal{F}_y}$, the ratio of rest frame to observation frame counts for $z = 0.5$



$$\frac{\mathcal{F}_x}{\mathcal{F}_y} = \frac{\int F'(\lambda)S_x(\lambda)d\lambda}{\int R'(\lambda)S_y(\lambda)d\lambda} = \frac{17928.35}{8293.36} = 2.16$$