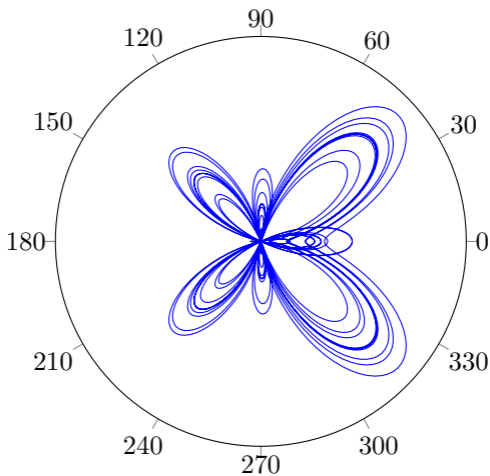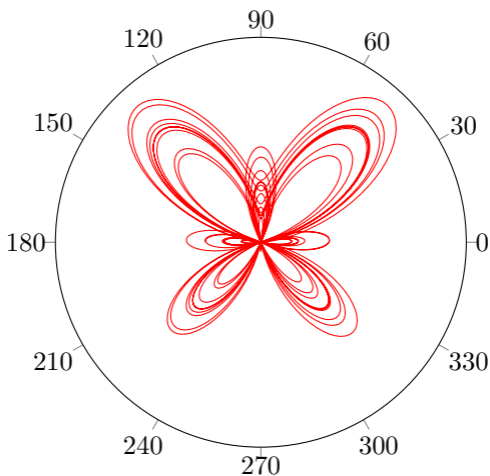The Butterfly curve: Fay's polar equation

$$\rho = e^{\cos\vartheta} - 2\cos(4\theta) + \sin^5(\vartheta/12)$$

The Butterfly curve: Geum and Kim's equation

$$\rho = e^{\sin\vartheta} - 2\cos(4\theta) + \sin^5\left(\frac{2\vartheta-\pi}{24}\right)$$