

$$\cos(r \sin \theta) = \sum_{n=0}^{\infty} \varepsilon_n \cos(2n\theta) J_{2n}(r)$$

$$\cos(r \cos \theta) = \sum_{n=0}^{\infty} (-1)^n \varepsilon_n \cos(2n\theta) J_{2n}(r)$$

$$\sin(r \sin \theta) = 2 \sum_{n=0}^{\infty} \sin((2n+1)\theta) J_{2n+1}(r)$$

$$\sin(r \cos \theta) = 2 \sum_{n=0}^{\infty} (-1)^n \cos((2n+1)\theta) J_{2n+1}(r)$$