Maths of the Day

$$2\arcsin^2(x) = \sum_{n=1}^{\infty} \frac{(2x)^{2n}}{n^2\binom{2n}{n}}$$

$$\Rightarrow \frac{\arcsin x}{\sqrt{1-x^2}} = \sum_{n=1}^{\infty} \frac{(2x)^{2n-1}}{n\binom{2n}{n}}$$