

# The quest for $\pi$

- The following formula computes 8 correct digits per iteration (Ramanujan):

$$\frac{1}{\pi} = \sum_{n=0}^{\infty} \frac{\left(\frac{1}{4}\right)_n \left(\frac{2}{4}\right)_n \left(\frac{3}{4}\right)_n}{n!^3} (2\sqrt{2}(1103 + 26390n)) \frac{1}{(99^2)^{2n+1}}$$