

$$\frac{355}{113}$$

$$\frac{553}{311+1}$$

12.2 Let numbers speak

“If you stare at a number long enough, the number will talk back to you.” This conviction of Dario Castellanos is stated in his article *The Ubiquitous π* [41] dated 1988, a collection of “numerological” findings which he and others have made over time.

1. The fraction $\frac{355}{113}$ is known to be a good approximation (to 6 decimal places) of π . The following approximation for $\sqrt{\pi}$

$$\sqrt{\pi} \approx \frac{553}{311 + 1} \quad (12.1)$$

which is almost equal to the fraction $\frac{355}{113}$ read backwards, is less well-known.

12.6 Why always more?

Why are people always looking for more digits rather than fewer? No doubt this was uppermost in the minds of Wei Gong-yi, Yang Zi-quiang, Sun Jia-chang and Li Jia-kai of the Academia Sinica Computer Centre in Peking, who in 1996 published an academic article entitled, *The Computation of π to 10,000,000 digits* [60]. The article made clear the trouble which the four authors had had with their calculation and how they had finally overcome the problems. The article naturally contains a list of references. One of these is another article which sounds familiar, *The Computation of π to 29,360,000 Decimal Digits* by David Bailey, 1988.

It would seem that the direction of progress is not always forwards.

The Computation of π to 10,000,000 digits

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Academia Sinica Computer Centre
Peking, 1996

Reference given in above paper:
The Computation of π to 29,360,000
Decimal Digits by David Bailey, 1988