

Hi this is Steve Nerlich from Cheap Astronomy [www.cheapastro.com](http://www.cheapastro.com) and this is *Cheap Astronomy, Live in LA!*

Well, it's pretty much what you'd expect – swimming pools movie stars, although the mobile phone coverage is a bit patchy. First day I visited Griffith Observatory, apparently some crazy rich guy's folly – well specifically Colonel Griffith J Griffith (I think the J stands for Griffith) – who built it in the 1930s despite the fact that even then LA light pollution was already becoming noticeable. To be fair though, its primary purpose, rather than a research centre is to be an astronomy education centre – and this it does awesomely well.

The planetarium is fabulous – and I got to sit in a seat dedicated to Brian May, ex Queen guitarist and of course now an astronomer. Find it if you can, it was the best seat I found since I was compelled to do a couple of shows. The planetarium switches from the standard (though high quality) planetarium projector to animation with lots of perspective shots giving you 3D effects. For quite a while my brain was fully convinced the floor was sloping down at 45 degrees to a flat screen on the wall. It really is that good.

The other displays were also excellent – lots of nicely explained issues such as the lunar cycle, eclipses and seasons – all done with moving models. The *Big Picture*, subject of a recent 365 Days of Astronomy Podcast was also there – perhaps more impressive in concept than reality – being a small strip of sky magnified onto a long two storey high wall meaning that details like galaxies and galactic clusters were made visible to the naked eye.

The Virgo cluster, which is part of the Virgo supercluster, which if you are familiar with the Cheap Astronomy home page you will know is the one that we are in, is right there in the middle of this really quite big *Big Picture*.

There was a nice exhibit of the planets, showing them all with their relative size – and their relative axial tilts. This got me thinking skeptically about the surety of reporting Venus's tilt as 177 degrees, based on the fact that it is apparently spinning the wrong way because it got flipped upside down by an impact event. Isn't it just as plausible that that an impact event just sent it spinning around the wrong way without flipping it upside down meaning it has an axial tilt of just three degrees... and it just spins the wrong way?

While that might be a matter of opinion, not so the spin calculations. Earth: 24 hours – and just in case you are thinking that maybe they rounded up 23 hours and 56 minutes to the nearest hour. Mars 24 hours and 37 minutes. No, no, no, no.

Please refer to my 365 Days of Astronomy Podcast on the 9<sup>th</sup> of May 2009. There you will find an outline of the fact that the Earth takes 23 hours and 56 minutes to spin once on its axis. A 'day' is exactly 24 hours long because that's the period of time between one sunrise and the next. For Mars it's 24 hours and 37 minutes to spin once on its axis and 24 hours and 39 minutes from one sunrise to the next. You can't have it both ways.

But anyway, it was very pleasing to also see some outreach explainers there – who I immediately shocked by asking a question. Having just checked out the observatory's 12-inch refractor, I asked about the light pollution of LA – which is when the crazy rich guy's folly line came up. Unfortunately I chose to casually remark on the frequency of which crazy rich guys seemed to be American – before I remembered, I was in America.

The explainer responded in good form, noting that what we were really dealing with was a pool of rich people of which a certain proportion were statistically likely to be crazy – leaving the implication hanging that the apparent frequency of crazy rich Americans was really just a result of their being so many rich Americans – and nothing to do with their being a more than usual number of crazy people.

Another great thing I saw at Griffith – a Segway tour! Seriously, there was the group of five people whizzing around on identical Segways and led by a guy with a microphone on a Segway telling the folks all about the observatory, surrounding Griffith park, James Dean and all that. I wondered how he managed to maintain a continuous narrative when it was necessary to switch between totally unrelated stories. Hmmm.

Then I had to some work – you know work, work – and then it was Tuesday morning just after 8.30 and I was in California.

*(This Week in Science excerpt)*

Smooth, huh? I bet Justin logged into Cheap Astronomy just as soon as they finished the show. The fame and fortune I've always dreamed of can be only moments away.

Thanks for listening. This is Steve Nerlich from Cheap Astronomy, [www.cheapastro.com](http://www.cheapastro.com). Cheap Astronomy offers an educational website where you can see the stars without having to buy a ticket to Hollywood – which is in Los Angeles, you know. No ads, no profit, just good science. Bye.