What is Deep Time?

Deep time, something very much older than us. Very much older than written history. Something that's old enough to encompass the glorious things that we see as geologists, 4.6 billion years of this planet.

If you go to the Grand Canyon and you look at this great trench holding a river at the bottom of it, and you think that the world is as old as written history, you're very confused. Because how can that river be down there when we can see what the river is doing? We know how rapidly the river is changing the world. People have been coming there for a couple of centuries and writing down what they know about it. And native peoples have been there for a few thousand years. And we know that its changed a little bit in that much time.

And so what's it doing there? Why is it there? If you open the door to deep time, you say OK, a sheet of paper a year, that much erosion, taking a sheet of paper off the rock every year, and you have way more time than is needed to carve that canyon. A sheet of paper a year in a million years, and you have the canyon.

And then you can start to see these greater stories. Because that's the time to cut the canyon. But how long did it take to make the rocks first? And so you see these tremendous stories that are sitting there. And you go out and look at the canyon. If you live in a shallow time, you look at the canyon and you say, isn't that great? It would make a nice picture. It would make a nice post card. And then you go to the visitor center.

And if you live in deep time, there's all these stories. And you can sit there and play in your mind's eye, the beauty of the seas coming and the seas going. And you can imagine what was that lizard that ran up the back of that sand dune, that's fossilized, and that big cliff, the first big cliff down from the rim of the canyon? There were lizards running across sand dunes when that was there. Why were there sand dunes there?

There's these amazing stories. And you stand there for an hour, and you're still thinking about them. And then you got to go walk down in and look at them closer. And rather than running to the gift shop and taking off to Las Vegas to waste your money gambling somewhere, you're lost in deep time. And it's just beautiful.