Deep Time & You

There really are things that matter to you that come out of deep time. That's one reason we have a geosciences department at Penn State. If you've got a job-- you're a geoscientist. You took an undergraduate degree here, you get a job with an oil company, and you're supposed to tell them, should I drill an oil well here or not? We know that oil is made by cooking dead organic material, dead algae for the most part. You know that if you've had oil in your engine and your engine gets too hot, the oil will burn up. Oil is flammable. If rocks have been too hot back in the past, you won't get oil out of them.

And so you need to know, has it been hot enough to cook those rocks? Has it not been too hot to break them down? What happened to them. And so to figure that out, you need to know something about how deeply they've been buried, how long they were down there, how long it took them to come back up, what is their path through time, temperature, space. And that requires knowledge of deep time. Some rocks are not going to give you oil, because it burned up. There's a little bit of carbon, a little bit of graphite, stuck in there, and you're not going to find oil out of that. And so you need to know something about that.