

MANY CHEERFUL FACTS

presents

Einstein's Equation

a talk by A.J. Tolland

11:10 am - 12:00 on Wednesday, May 3rd, in room 1015.

You've all heard the cocktail party spiel on General Relativity: Matter causes spacetime to curve, and then the curvature of spacetime causes matter to move in interesting ways. In this talk, I'll explain how to turn these unsatisfyingly vague statements into a precise and beautiful set of ten coupled nonlinear hyperbolic differential equations, which you can use to impress the guests at your next cocktail party.

*I am the very model of a modern Major General,
I've information vegetable, animal, and mineral,
I know the kings of England, and I quote the fights historical
From Marathon to Waterloo, in order categorical;
I'm very well acquainted, too, with matters mathematical,
I understand equations, both the simple and quadratical,
About binomial theorem I'm teeming with a lot o' news,
With many cheerful facts about the square of the hypotenuse!*

- Gilbert & Sullivan $P \circ P$