MANY CHEERFUL FACTS

presents

What Functor Do You Represent?

a talk by David 'The Guru' Smyth

12:10 pm - 1:00 on Wednesday, March 9th, in room 1015.

In this talk, we'll ask the above question of all our most cherished elementary mathematical objects. Showing how various universal constructions (limits, adjoint functors) can be defined and understood in terms of the functors they represent will probably take most the hour, but hopefully there will be time to indicate how this point of view can actually pay dividends in concrete mathematical problems, e.g. in defining moduli spaces. We're starting from the definition of a functor, so the talk should be accessible to all, and uninteresting to those well-versed in category-theoretic language.

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 $P \circ P$