MANY CHEERFUL FACTS

presents

How To Get A Handle On Unbounded Operators

a talk by Jose Alameida

14:10–15:00 on Wednesday, April 9, in Evans 1015.

⋆⋆⋆ PLEASE NOTE THE EXCEPTIONAL TIME. ⋆⋆⋆

Many operators that come up in "real life" are unbounded (i.e., discontinuous), for example the derivative operator. However, like the derivative operator, many of these such unbounded operators are well behaved in the sense that they have a closed graph. I will discuss why these operators are still reasonable to work with, and why this is especially the case when the operator is self-adjoint. I will of course discuss what all of this means and give plenty of examples along the way.

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, $P \circ P$

The website for Many Cheerful Facts is
`http://math.berkeley.edu/~mcf/`