

MANY CHEERFUL FACTS

presents

Hex and the Brouwer Fixed Point Theorem

a talk by Alex Fink

2:10–3:00pm on Tuesday, September 30, in 1015 Evans.

I'll prove the equivalence of the Brouwer fixed point theorem and the fact that somebody wins the game of Hex, and then illustrate how this proof of Brouwer is the same as the one you already know.

*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 o P*

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