Many Cheerful Facts

Organizers: Yael Degany and Jason Ferguson

Friday, 2:10–3:00pm, 939 Evans

April 9   **Julia Erhard**, UC Berkeley
            An Independent Statement of Pure Mathematics

According to Goedel's First Incompleteness Theorem there are statements which are true in the system of natural numbers but not provable in Peano Arithmetic. For about 40 years, the only known statements with this property were sentences of logic asserting their own unprovability or asserting the consistency of a theory. Finally, in the 70's, an example of an independent purely mathematical statement was found: The Paris-Harrington Theorem.

No formal prerequisites, although some familiarity with Ramsey's Theorems and very basic undergraduate logic will be helpful.