



**RUMA**  
Rutgers Undergraduate Mathematics Association

presents...

$$e^x$$

A Lecture by Professor Matthew Russell

Dept. of Mathematics, Rutgers University

ABSTRACT:

We will explore the history of the exponential function  $e^x$ .

$$e^x = \sum_{n=0}^{\infty} \frac{x^n}{n!}$$

$$y'(x) = y(x), y(0) = 1$$

$$x = \int_1^y \frac{1}{t} dt$$

$$e^x = \lim_{n \rightarrow \infty} \left(1 + \frac{x}{n}\right)^n$$

**TUESDAY**  
**FEBRUARY 11, 2020**  
**HILL 423 AT 7:00 PM**

*\*Pizza and refreshments will be served*

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