

# Department of Mathematics

## Spring 2018 Colloquium Series

### Surreal Numbers and Combinatorial Games

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St. Mary's College of California

**Thursday, February 8, 2018**

**BSS 204, 4:00 pm**

All students of mathematics study number systems: the integers, rationals, reals, and complex numbers. Of these, the complex numbers were developed most recently - almost 500 years ago! But did you know that mathematicians continue to develop new number systems? In the early 1970s, while researching the mathematics of the board game Go, John H. Conway gave a construction of a number system that came to be called the *surreal numbers*. This talk will define the surreal numbers, discuss some of their mind-bending properties, and show how they can be used to analyze games.

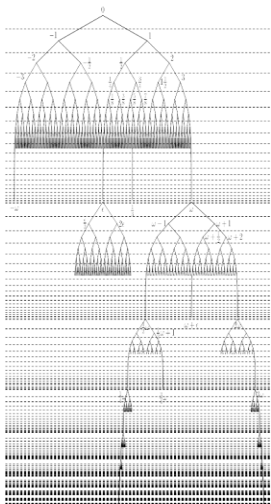


Image: Lukáš Lánský, <https://commons.wikimedia.org/w/index.php?curid=19134117>

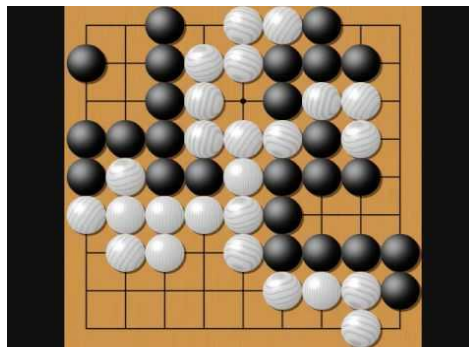


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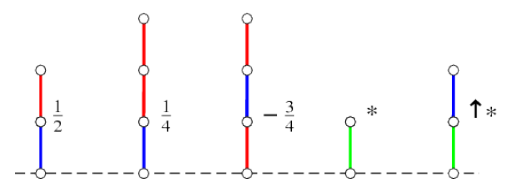


Image: mathworld.wolfram.com

For more info, go to <http://www.humboldt.edu/math/news-and-events/math-colloquium>

**We cordially invite you to the Pre-Colloquium Tea on the third floor of the BSS building at 3:30 pm on Thursday.**