

# VCU Discrete Mathematics Seminar

## *Solving the maximum clique problem in practice*

**Prof Pablo San Segundo  
(Polytechnic University of Madrid)**

Wednesday, Nov. 30

1:00-1:50 EST

Watch Party in 4145 Harris Hall

& Zoom @ <https://vcu.zoom.us/j/92975799914>  
password=graphs2357



The maximum clique problem is a fundamental NP-hard problem in graph theory which finds many applications spanning different fields of science. I have had the fortune of being a main actor in the 'horse race' for the state-of-the-art exact algorithm in the last two decades. During this period, many interesting upper bounds and branching techniques have been described, improving the performance of prior solvers by orders of magnitude. In this talk, the main components and some cutting edge improvements employed by the latest combinatorial branch-and-bound algorithm CliSAT will be presented.

For the DM seminar schedule, see:

<https://vcumath.github.io/Seminar/dms.html>