VCU Discrete Mathematics Seminar

Strong 4-Colourings of Graphs

Prof Jessica McDonald
(Auburn)

Wednesday, Sept. 28
4:00-4:50 (**Special Time!**)

Watch party in 4145 Harris Hall

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

In this talk we'll discuss strong 4-colourings of graphs and prove two new cases of the Strong Colouring Conjecture. Let H be a graph with maximum degree at most 2, and let G be obtained from H by gluing in vertex-disjoint copies of K_4. We'll show that if H contains at most one odd cycle of length exceeding 3, or if H contains at most 3 triangles, then G is 4-colourable. This is joint work with Greg Puleo.