



UNIVERSITY OF CALIFORNIA,  
RIVERSIDE

DEPARTMENT OF MATHEMATICS  
COLLOQUIUM

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DR. NICHOLAS PROUDFOOT  
UNIVERSITY OF OREGON

“HYPERPLANE ARRANGEMENTS  
AND HODGE THEORY”

A hyperplane arrangement is a finite collection of hyperplanes in a vector space. I will discuss two theorems, each of which say that certain numerical invariants of hyperplane arrangements are non-negative, both of which are proved using algebraic geometry. I will also discuss work in progress to extend these results to the more general setting of matroids.

WEDNESDAY, MARCH 6<sup>TH</sup>, 2019

SKYE HALL 284

3:40 - 4:10 P.M. TEA TIME

4:10 - 5:00 TALK