

**Date:** April 15th, 2009

**Speaker:** Robert Feaver, UNC Asheville

**Title:** *Integer programming and ACC scheduling*

**Abstract:** The schedule that was made for the 1997-1998 ACC Men's basketball season was difficult to come by. First of all, there are numerous (more than you would think!) constraints that the league, the coaches, the fans, and the media all require in order for a successful season to be made. After this is taken into consideration, we break the scheduling process down into three steps:

1. Generate possible patterns to create a pattern set using enumeration and integer programming.
2. Assign games to the pattern set to create timetables using integer programming.
3. Assign teams to the timetables, thus completing our final schedule.

In order to understand this thoroughly, I will introduce and explain integer programming using examples to show how it all works. This talk will explain one of the many systems that allows for complicated scheduling to become quite easy.