

lowa Colloquium on Information, Complexity, and Logic

## February 2018 Meeting

Location: Drake University in Collier-Scripps Hall 235

Map of Drake University

Parking Map

Time: Thursday, February 22 at 3:00 PM

Speaker: Peter Dixon (Iowa State University)

Title: Time Vs Space and Connections to Derandomization

**Abstract**: A classical result of Hopcroft, Paul and Valiant shows that every Turing machine that runs in time O(t) can be simulated using O(t/log t) space. We discuss about extending this result to randomized computations and an application to derandomization of probabilistic time-bounded computations.

No background on complexity theory is assumed for the talk.

**Parking Information:** There are a limited number of guest parking passes available. Please contact Adam Case (<u>adam.case@drake.edu</u>) to request a pass. There is also free parking along 24<sup>th</sup> Street on the east side of Lot 1, and two hour parking is available along 25<sup>th</sup> Street on the west side of Lot 1.

**To get from Lot 1 to Collier-Scripps Hall:** Walk west on Carpenter Avenue and down the painted street. Take a right just after Jewett Residence Hall and another right just after Medbury Hall. From here, Olin Hall is on the left and Collier-Scripps Hall is on the right.