

West Chester University
Spring 2011 Computer Science & Mathematics Colloquium

presents

RYAN HAYWARD

University of Alberta

"The Story of Hex"



Wednesday, March 16, 2011 from 3:15 to 4:15PM
UNA 162

I will give a brief history of Hex, the classic 2-player connection game, and a report on some recent developments, including a Hex handicap strategy (on the $n \times n$ board, the 1st player wins if allowed $(n+1)/6$ stones on the 1st move), tips on playing Reverse/Misère Hex, and the current state of automated Hex players and solvers.

This is joint work with Broderick Arneson and Philip Henderson.

Ryan B. Hayward was raised in Vancouver, Winnipeg and Lethbridge. He attended UBC, transferred to Queen's, and --- after a study/travel/ski hiatus based in Grenoble --- completed a BSc (Queen's math '81) and an MSc (Queen's math '82, supervisors Selim Akl and Peter Taylor). He next moved to Montreal --- and Paris for a few months in '84 --- where he completed a PhD on perfect graphs (McGill cs '87, supervisor Vašek Chvátal).

In addition to his supervisors, his many teachers include Mr. Oleksy, Mr. Hori, Mr. Kosaka, Walter Gage, Jim Verner, Dan Norman, Jon Davis and David Gregory. Fellow doctoral students include Chinh Hoàng, Bruce Reed, and Stephan Olariu.

He was an assistant professor (cs) at Rutgers for three years before taking an Alexander von Humboldt fellowship at Bonn. He returned to Canada in '90, and held academic positions at Queen's (cs) and Lethbridge (math/cs) before joining the UofA in '99, where he is currently a professor in the department of computing science.

He studies algorithms related to graphs or games.

He is particularly interested in the two-player board game Hex, which he learned from Claude Berge. A member of the UofA's GAMES research group, he leads a team --- including Broderick Arneson and Philip Henderson --- that developed a Hex solver and players. The solver has solved half of the 9×9 openings and is stronger than human. The players Wolve ('08) and MoHex ('09, '10) won gold in Hex at the Computer Games Olympiad.

He commutes by bike, and once rode solo from Vancouver to Lethbridge.

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