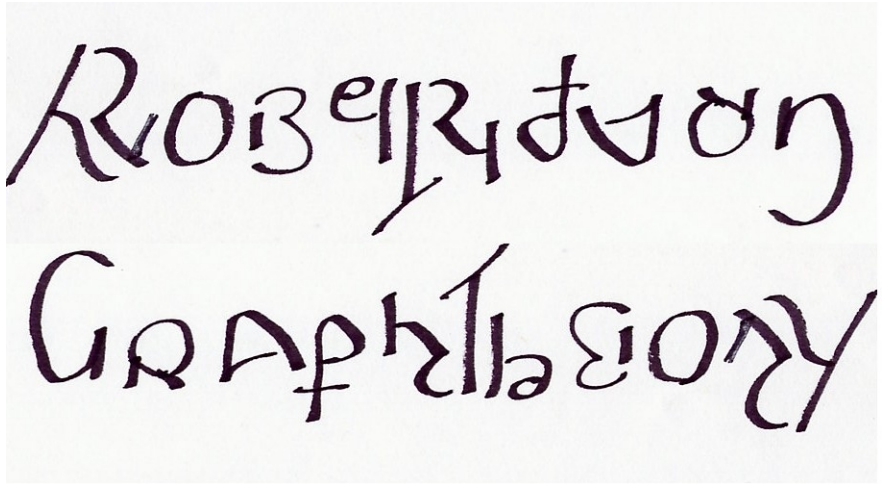
G. Neil Robertson's 80th Birthday



The Robertson Family

G. Neil Robertson

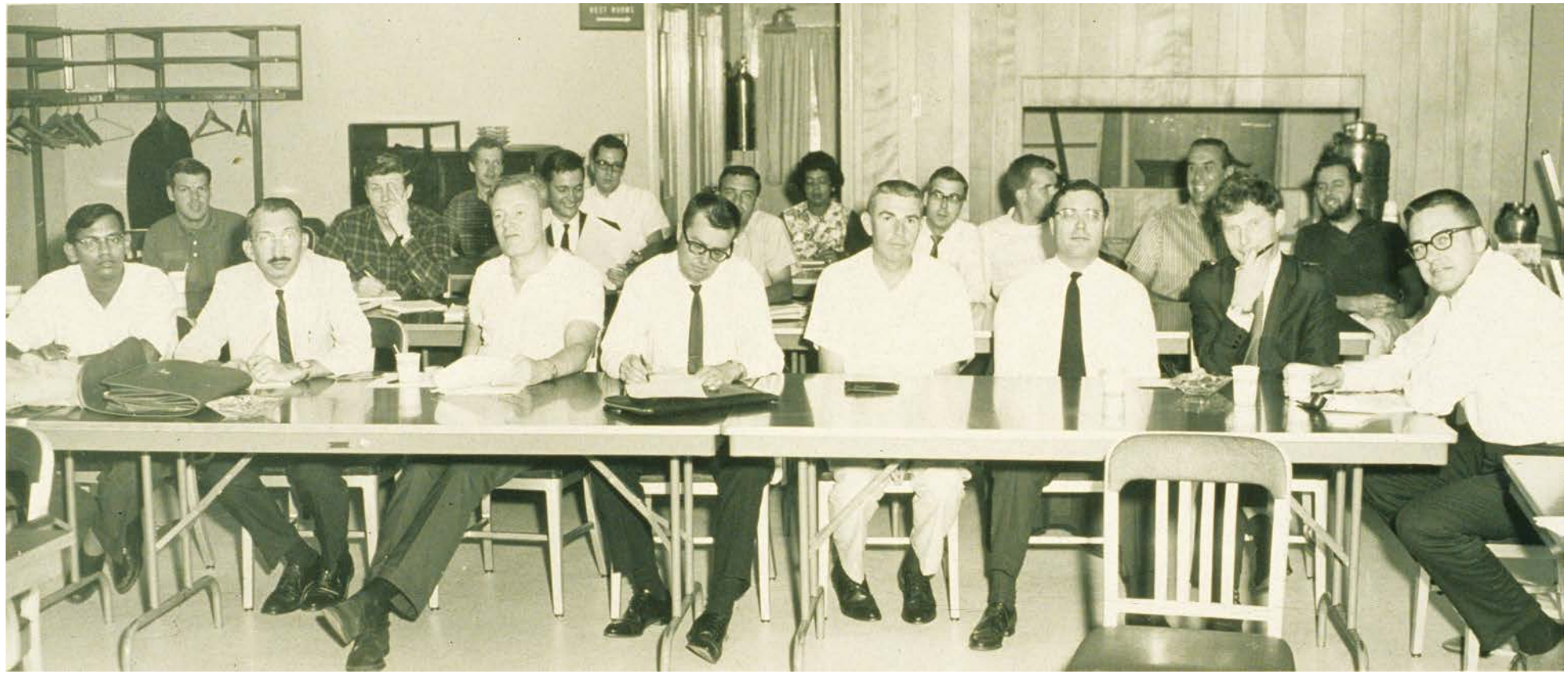
Born November 30, 1938

B.Sc. Brandon College (Manitoba) – 1959

Ph.D. U. Waterloo under Bill Tutte - 1969

Professor at Ohio State since 1969

G. Neil Robertson



1964 Conference at Waterloo
Dijen Ray-Chaudhuri, Neil, Bill Tutte, Dan Younger,

The Robertson Family

University of Waterloo
Faculty of Mathematics Alumni Achievement Medal

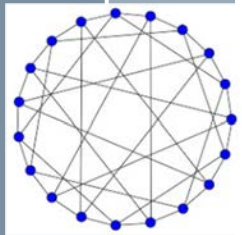
2002

Neil Robertson (PhD 1969, Mathematics)
Faculty member in the Department of Mathematics at Ohio State University (Columbus).

Winner for his academic accomplishments, particularly his pioneering work in graph theory and his profound influence in the area of combinatorics.

2012
Member of the Inaugural Class of
Fellows of the American Mathematical Society

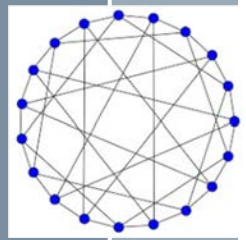
AMS AMERICAN MATHEMATICAL SOCIETY
Advancing research. Creating connections.



THE OHIO STATE UNIVERSITY

1997
Ohio State University Distinguished Scholar Award

2003
Ohio State University
Distinguished Professor of the College of Mathematical and Physical Sciences



JOURNAL OF COMBINATORIAL THEORY, Series B **131**, 243–389 (2017)

Graph Minors.

LXIV. Obstructions to Distinguished Scholarship

Neil Robertson *
Department of Mathematics, The Ohio State University
231 West 18th Avenue, Columbus, Ohio 43210

and

P.D. Seymour
Department of Mathematics, Princeton University
Princeton, New Jersey 08540

Received November 30, 2003

Let G be a graph. The *scholarship* of a graph is a complicated function of such properties of the graph as its paper-width and respectativity. This paper will prove that the unique graph with distinguished scholarship is the Robertson graph. Included as a corollary is a structure theorem for all graphs with no Robertson minor.

These results will be of use in the next 14 papers.

1. INTRODUCTION

All graphs in this paper are people who are undirected and may have loop-the-loops or multiple personalities. Let the Robertson graph be the unique 7-connected trivalent graph.

In order to characterize the obstructions to distinguished scholarship, a useful concept must first be defined. A *snarl* is a tangled maze which satisfies the snarl axioms, defined in the next section. The main result of the paper is the following:

(1.1) Every snarlless graph with no Robertson minor can be constructed by clock-summing graphs which embellish the torus.

Spoof: We proceed by induction on φ, the number of folders on Robertson's desk. Obviously, the case of $\varphi \leq 100$ is absurd, so we may assume that the respectativity

* Research fully supported by the Maharry–Sanders Foundation for Parodical Graph Theory, grant number MSF 14–5–9–12, CCASWVOCRZZDM

Delbert Ray Fulkerson Prize

AMS American Mathematical Society
Advancing research. Creating connections.

1994 **Neil Robertson, Paul D. Seymour, and Robin Thomas**, "Hadwiger's conjecture for K6-free graphs", Combinatorica 13 (1993), 279-361.

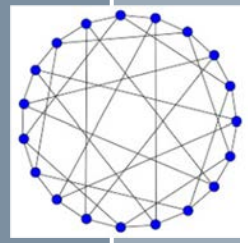
2006 **Neil Robertson, Paul D. Seymour,** "Graph Minors XX. Wagner's conjecture", Journal of Combinatorial Theory Series B 92, No 2, (2004), Pages 325-357.

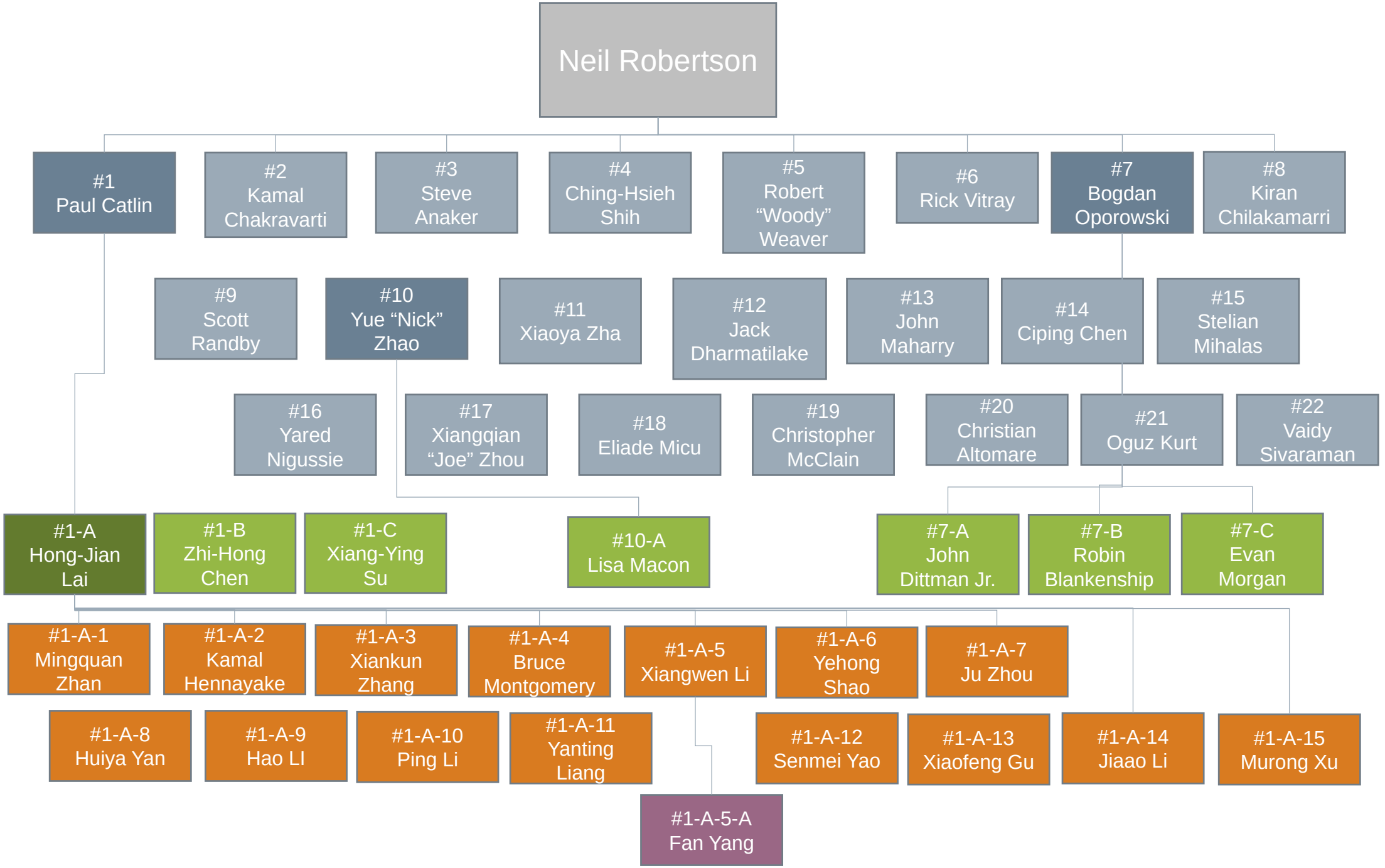
2009 **M. Chudnovsky, N. Robertson, P. Seymour, and R. Thomas**, "The strong perfect graph theorem," *Annals of Mathematics*, 164 (2006) 51-229

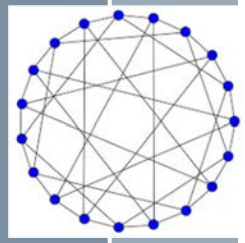
George Pólya Prize

2004 **Neil Robertson, Paul D. Seymour**

siam Society for Industrial and Applied Mathematics




Neil Robertson
#1 Paul Catlin
#2 Kamal Chakravarti
#3 Steve Anaker
#4 Ching-Hsieh Shih
#5 Robert "Woody" Weaver
#6 Rick Vitray
#7 Bogdan Oporowski
#8 Kiran Chilakamarri
#9 Scott Randby
#10 Yue "Nick" Zhao
#11 Xiaoya Zha
#12 Jack Dharmatilake
#13 John Maharry
#14 Ciping Chen
#15 Stelian Mihalas
#16 Yared Nigussie
#17 Xiangqian "Joe" Zhou
#18 Eliade Micu
#19 Christopher McClain
#20 Christian Altomare
#21 Oguz Kurt
#22 Vaidy Sivaraman
#1-A Hong-Jian Lai
#1-B Zhi-Hong Chen
#1-C Xiang-Ying Su
#10-A Lisa Macon
#7-A John Dittman Jr.
#7-B Robin Blankenship
#7-C Evan Morgan
#1-A-1 Mingquan Zhan
#1-A-2 Kamal Hennayake
#1-A-3 Xiankun Zhang
#1-A-4 Bruce Montgomery
#1-A-5 Xiangwen Li
#1-A-6 Yehong Shao
#1-A-7 Ju Zhou
#1-A-8 Huiya Yan
#1-A-9 Hao LI
#1-A-10 Ping Li
#1-A-11 Yanting Liang
#1-A-12 Senmei Yao
#1-A-13 Xiaofeng Gu
#1-A-14 Jiaao Li
#1-A-15 Murong Xu
#1-A-5-A Fan Yang



In Memoriam

Paul Catlin (1948-1995)

Embedding subgraphs and coloring graphs under extremal degree conditions (1976)

Kiran Chilakamarri **(1953-2015)**

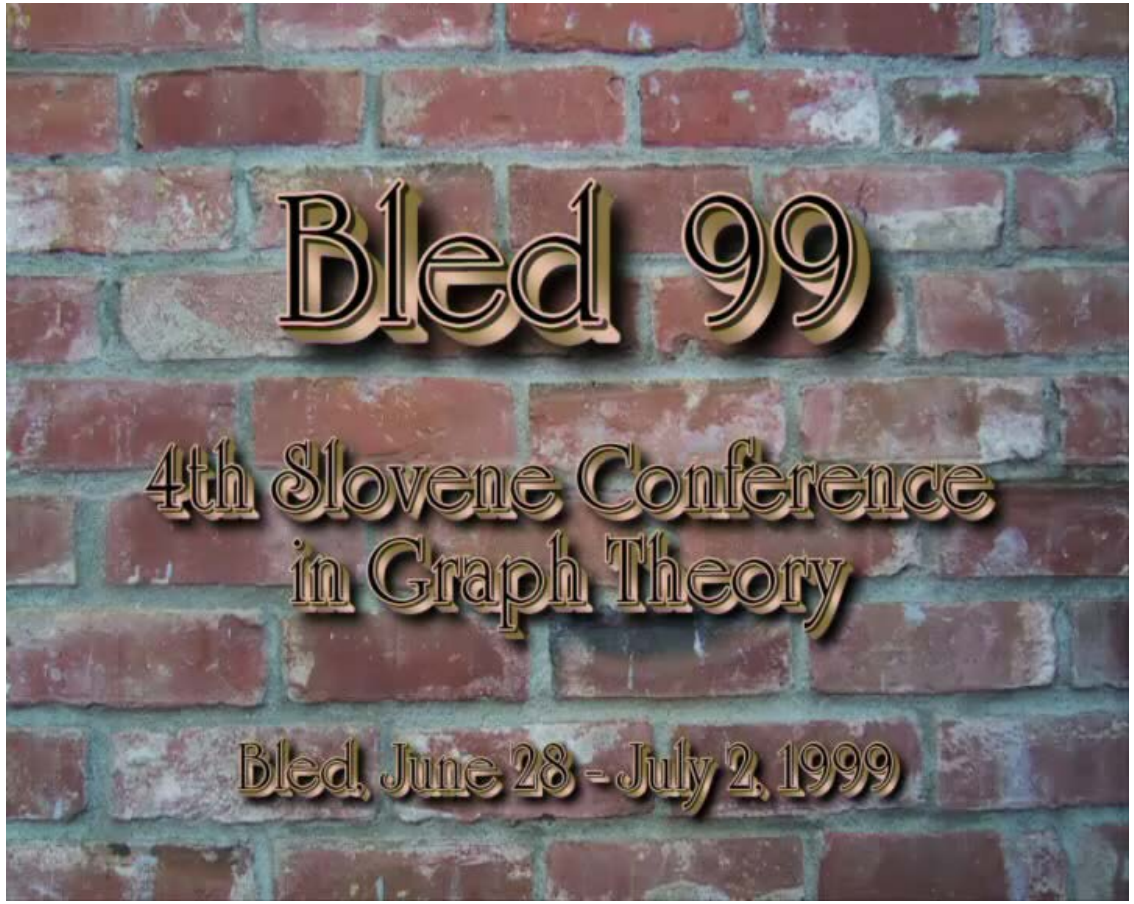
Unit-Distance Graphs In Euclidean Spaces (1990)

Jack Dharmatilake **(1953-1994)**

Binary Matrices of Branch Width 3 (1994)

Neil and Bojan

Bled Conference 1999



Somewhere in the 1990's

Proof of the Hadwiger Conjecture for k=5

Neil, Gisele and Robin

1998

Oberwolfach Conference 1999

65th Birthday Conference 2003

65th Birthday Conference 2003

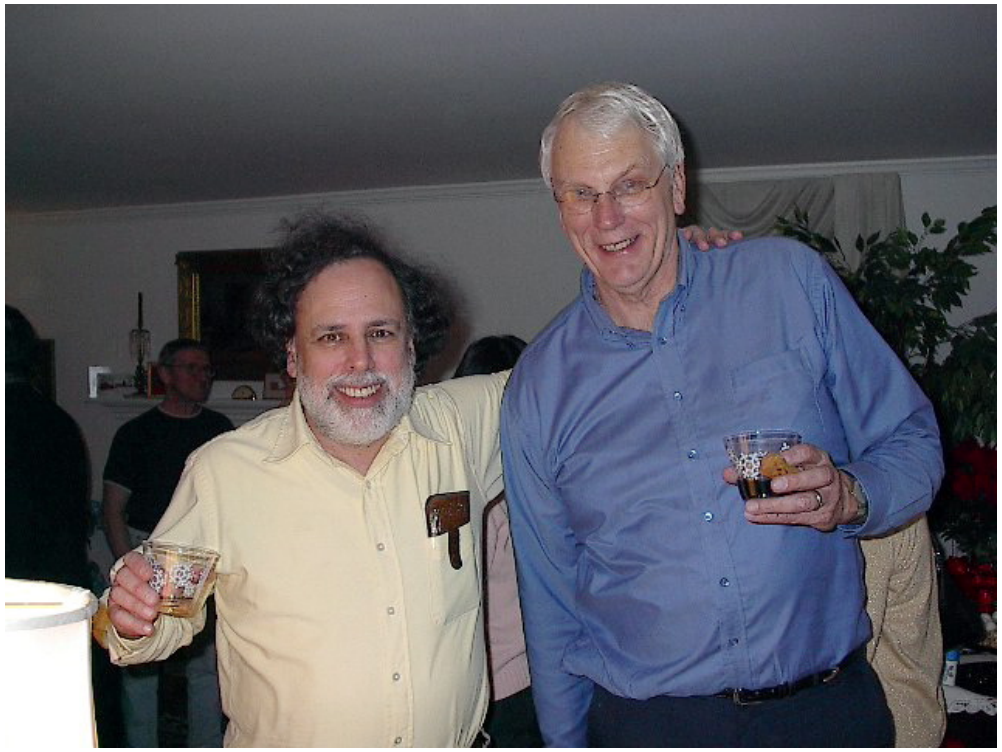
Robin Thomas,

Neil and

Yared Nigussie

65th Birthday Conference 2003

Neil, Zi-xia Song, Guoli Ding, Paul Wollan, and the back of Xiaoya Zha's head



Tom Zaslavsky and Tom Dowling

Neil at ICM in Korea 2014

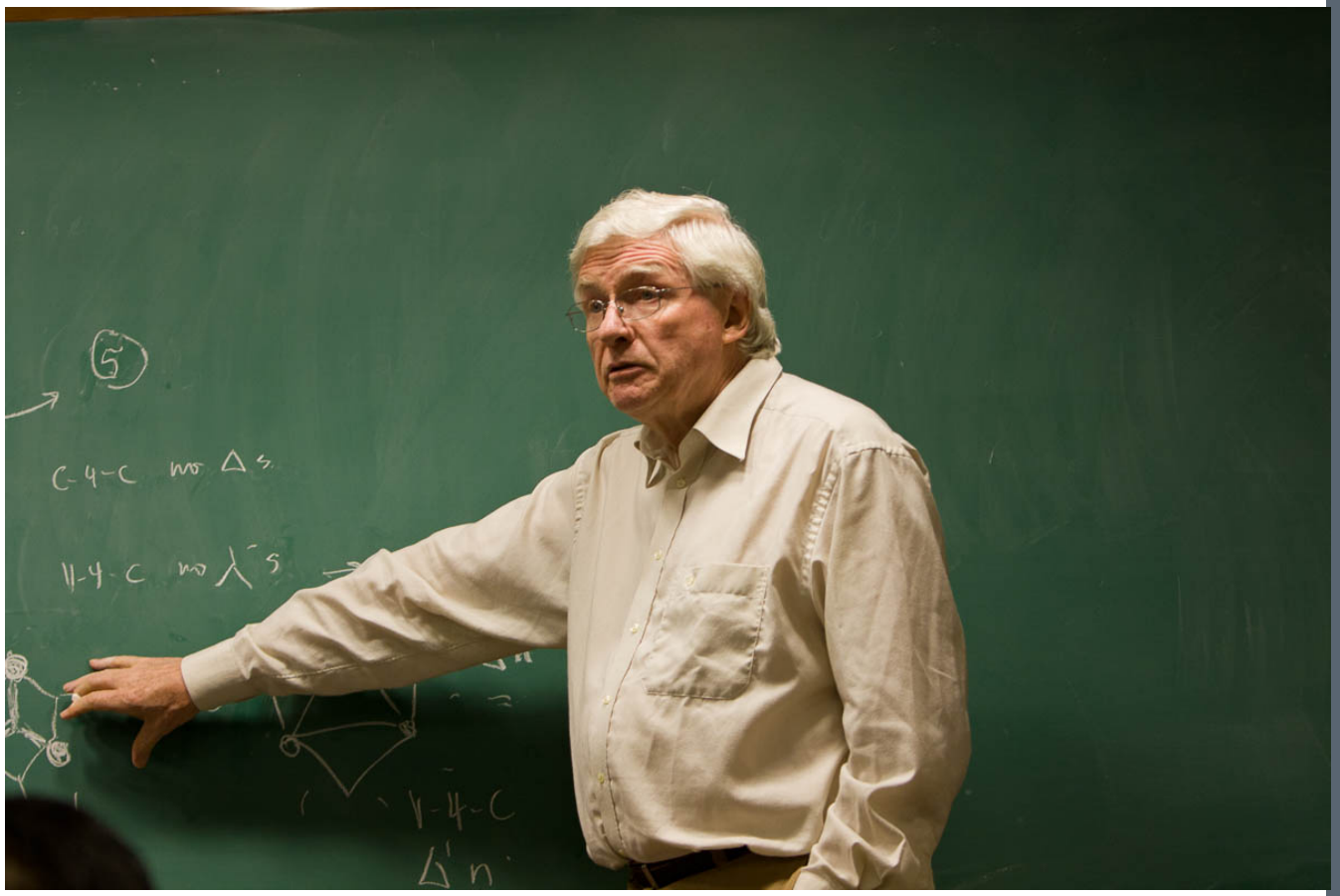
With Chris McClain, Sophie Burrill, Matt DeVos, Sang-il Oum, and O-joung Kwon.

MIGHTY LVII at Wright State 2016

Bogdan Oporowski and Neil

Gisele and Neil (and James Oxley)

Dan Cranston and Neil



Dan Cranston and Neil