About Robin Thomas

Robin Thomas received his doctorate from Charles University in Prague, Czech Republic, under the direction of Jaroslav Nešetřil. His mathematical ancestry includes Felix Klein and Carl Gauss, and he has had 11 doctoral students of his own so far. Robin is a professor of mathematics at the Georgia Institute of Technology, and his research interests revolve around the structure of graphs and applications to algorithms and graph coloring. In 1994 he received, with Neil Robertson and Paul Seymour, the D. Ray Fulkerson Prize for the paper "Hadwiger's conjecture for K_r free graphs". With Paul Seymour, Neil Robertson, and Maria Chudnovsky, he recently solved the famous strong perfect graph conjecture of Berge, namely that a graph is perfect if and only if it contains no odd hole or anti-hole. He is writing a book on structural graph theory. Robin's spouse Sigrun Andradottir is a Professor at the School of Industrial and Systems Engineering of Georgia Institute of Technology. They have three children: Misha, Klara, and Martin.

Juggling and Mathematics, To Interact with People Worldwide

from NIPPONIA No. 47 December 15, 2008
Written by Takahashi Hidemine

He is a globally known mathematician, and a street performer, too. One moment he is working on a difficult math problem involving number combinations, but a moment later he calmly gets out his juggling pins and tosses them in the air. What is going on here?

Peter Frankl is so unusual you cannot pigeonhole him, except to say he is one of the most famous non-Japanese people living in Japan today.

"Mathematics is a lonely subject—you sit by yourself puzzling things out, working at something few people can understand. Juggling is the opposite—it draws a crowd and everyone has fun."

Plenary and Invited Speakers' Erdos Numbers

Peter Frankl, Joseph Siran and Rick Wilson have Erdos number 1. Eiichi Bannai, Andries Brouwer, Richard Brualdi, Willem Haemers, Gyula Katona, Hadi Kharaghani, Jack Koolen, William Martin, Brendan McKay, Robin Thomas, Shahriar Shahriari, Richard Stanley, and Qing Xiang have Erdos number 2, while Helene Barcelo, Samad Hedayati, and Qiang Wang's Erdos number is 3.

Conference Program

09:00 - 10:00 Frankl
10:00 - 10:30 Coffee Break
10:30 - 11:30 Thomas
11:30 - 11:50 Rahnamai Barghi
11:50 - 12:10 Ashrafi
12:10 - 12:30 Moazzami
12:30 - 14:00 Lunch
14:00 - 15:00 Xiang
15:00 - 15:20 Sadeghi
15:20 - 15:40 Bibak
15:40 - 16:15 Coffee Break
16:15 - 17:15 Wang

IPM20 - Combinatorics 2009

May 15-21, School of Mathematics, IPM, Tehran, Iran
Juggling and Mathematics, To Interact with People Worldwide (cont.)

These two things could hardly be more different from each other, but through them I’ve found a balance in my life,” he says in fluent Japanese.

Frankl was born in Kaposvár, Hungary. His parents were sent to a Nazi concentration camp during the war because of their Jewish heritage and lost everything they had, even family members. From his bitter experience his father often told his son, “The only things you can be sure of having are the knowledge in your head and the feelings in your heart.”

Mathematics fit in with this piece of advice—all he needed was paper and a pencil. Spurred on by his father, Frankl was multiplying two-digit numbers by the time he was four, and catching the attention of the entire town where he lived. In elementary school, he won first place in a national arithmetic competition. Later, while a senior high school student, he participated in the International Mathematical Olympiad and won a gold medal. He was soon recommended for admittance to the science faculty at a national university in Hungary, and he enrolled without any other formalities.

With all that studying he needed some diversion, so he started practicing juggling. He improved rapidly and, after graduating from university, enrolled in the national circus school. There he learned tightrope walking and clown techniques, and this brought him an official license from the Hungarian government to perform on the street.

Mathematics and street performance—with a full background in these two fields, Frankl set out to wander the world. “My travels were a search for freedom.”

By the time he landed in Japan in 1982, he was 29. “Up until then, in just about every country I visited I was made to feel somewhat of an outsider, because I’m Jewish. But as soon as I arrived in Japan I saw that things are different here—people welcomed me warmly, perhaps out of curiosity. The Japanese are considerate of others—they look out for you. It was like I had finally come home.”

Frankl has spent about 20 years in Japan so far. During that time he has helped make it possible for senior high school students to represent Japan at International Mathematical Olympiads, produced a range of mathematics teaching materials for all ages, and got many Japanese interested in the mysteries of math.

He has traveled to more than 80 countries, and draws from those experiences when giving lectures on how to interact with other cultures. His audience is sure to see him juggle, too—he does that to reach out to people at another level, where everyone can have a good time.

In May 2008, he teamed up with the Japan Culture Volunteers Program sponsored by Japan’s Ministry of Foreign Affairs. (The program sends volunteers from Japan to four central and southeastern European countries, including Hungary, to introduce the Japanese language and culture). At program events he spoke about his own experiences, keeping things simple so his listeners could relate to what he had to say. He says he wanted to stress the worthwhile aims of the program.

“Japan is admired for its economic might, but what I admire most is the people. Animé and manga are known throughout the world, and I believe their quality is so good because the Japanese people who produce them are, like most Japanese, serious and sincere—they want to get things right. That’s the kind of thing I say when I talk to people from other countries about Japan.”

Frankl says he combines math and juggling skills much like the samurai in old Japan combined the way of the warrior with studies of classical literature. People need to study, and they need to have fun, too. Listening to him, one sees Japan and its culture from a different perspective, a perspective that is new and valuable for people from other countries, and for Japanese people as well.
Some Photos of The Second Day
A Course in Combinatorics
by Kath Abela Wilson

if you meet my eyes
looking over the hydrangeas
how do you know your computer will work
what are your lower bounds
what the parameters the minimal explanation
of our complicated interaction?

how could we generalize to maximize our aim
what probabilistic asymptotic
computational construct could make this
roux for two
covering arrays displaying
our pairwise compatibility

now into the serene pool the look
amidst the framing moss and tall grass
nodes, degrees, diameters,
our eyes are bubble sorts recursively constructed
staring through bamboo channels
floating rafts of iris

how can you keep me
pristine, singular, for yourself against
suspicious users unwilling to pay the price?
embed me
watermark imperceptibly
what you want to keep

through paths into the hills
we’ve relaxed our plan thanks to your intent
let go one end of it
that need not be on the circumference
we’re decomposing bridges
found low ceilinged a darkish cave

a subpath of our outer walk,
a subgraph of a particular kind
let this be our focus,
the long time representative
surface of us has wrapped around itself
and our embrace has turned spherical

our proof is elementary but not trivial
consider the rational coefficients
the number of congruences
the power of our prime
the bound is the best possible identity
we omit the details

Author’s Note: with thanks to mathematicians
Rick Wilson, Charles Colbourn, Frank Hsu,
Takashi Kitagawa, and Mark Ellingham, and the
gardens of Kamakura for their influence on this
poem--written at the International Workshop on
Combinatorics, Keio University, Yokohama,
Japan, June, 2007

*The above poem will appear in Totem, the
Caltech Literary Journal, Spring, 2009

The IPM staff has the gratitude of the organizing committee

Mr. Hosseinzadeh!
Negotiating for better conditions!