

## Today's Iranian Mathematical History Corner

Jamshid Kashani<sup>1</sup> (circa 1380--1429) was born in the city of Kashan in Iran. Like most of his contemporaries he wrote his scientific works in Arabic but his first language was Persian (Farsi)---he wrote letters to his father in Persian and a collection of these letters have survived. Kashani was a master of the mathematical tradition of Karaji, Samawal, and others. "He calculated  $2\pi$  to nine sexagesimal places and translated this into sixteen decimal places. This was an achievement far beyond anything which had been obtained before, either by the ancient Greeks or by the Chinese (who achieved 6 decimal places in the 5<sup>th</sup> century).



It would be almost 200 years before van Ceulen surpassed Al-Kashi's accuracy with 20 decimal places."<sup>2</sup> As an example of his algebraic methods, Kashani extracted the fifth root of 44 240 899 506 197. Often the Flemish mathematician Simon Stevin (1548--1620) is credited with the introduction of decimal fractions. Even though it is now known that Kashani had given a clear treatment of these fractions in his *Key to Arithmetic* (completed on March 2, 1427), it seems that some of the ideas were present in the works of other mathematicians such as al-Samawal (circa 1130--1180) long before Kashani's work.

## On Rice and Tahdig (from <http://www.asiafood.org/persiancooking/rice.cfm>)

According to ancient Chinese writings, the Chinese began to grow rice about seven thousand years ago, during the New Stone Age. The Persian word for rice, *berenj*, comes from the Sanskrit *vrihi*. Rice was probably brought to Iran from southeast Asia or the Indian subcontinent and first cultivated in the Caspian area around the fourth century B.C.E. The best Persian rice still comes from Gilan, by the Caspian, where it is also the diet staple, eaten for breakfast, lunch, and dinner.



There are a number of ways to cook rice. The one used for the best occasions is *Chelow*---the process of cooking it involves presoaking, parboiling, rinsing, and steaming. This results in a fluffy rice with each grain separate, and the bottom of the pot has a crisp golden brown crust, *tah dig*. *Tah dig* should be a golden color, never scorched or dark brown. The reputation of Iranian cooks rests on the quality of their *tah dig*, or golden crust. *Chelow* is then eaten with *khorosht*, called *chelow-khorosht*, or with *kabab*, called *chelow-kabab*.

## A News Item

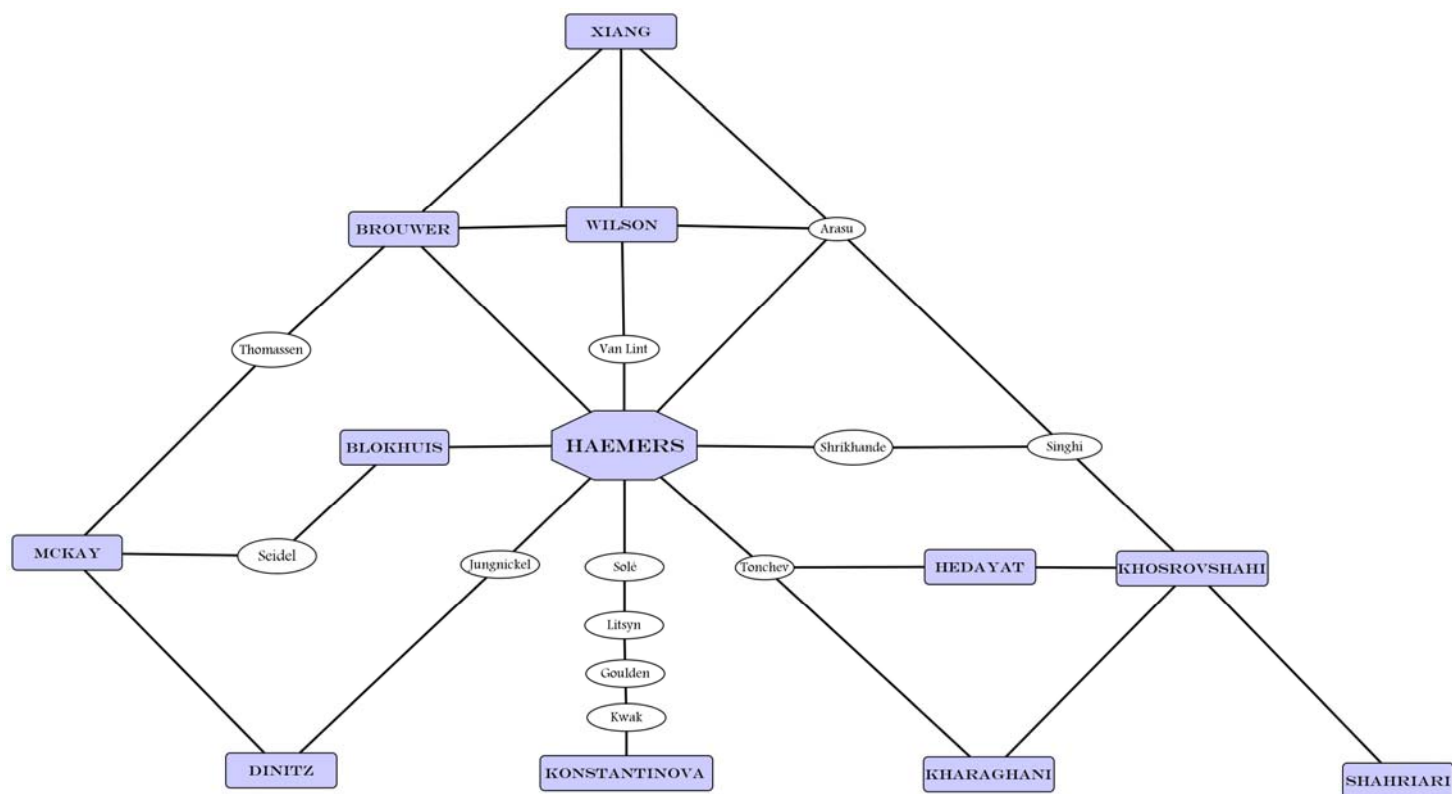
Patric R. J. Östergard, of Helsinki University of Technology, Finland, was one of the invited speakers of IPM Combinatorics II. Unfortunately, he fell ill before the conference and couldn't attend the workshop. Brendan D. McKay is going to present Patric's talk. Our thanks to Brendan!

<sup>1</sup> His name is often written in equivalent Arabic forms such as al-Kashi.

<sup>2</sup> John J O'Connor and Edmund F Robertson, *The MacTutor History of Mathematics archive*, available at <http://www-history.mcs.st-andrews.ac.uk/history/index.html>.

# Collaboration Distance of Keynote Speaker(s) of the Day

*Willem Haemers*



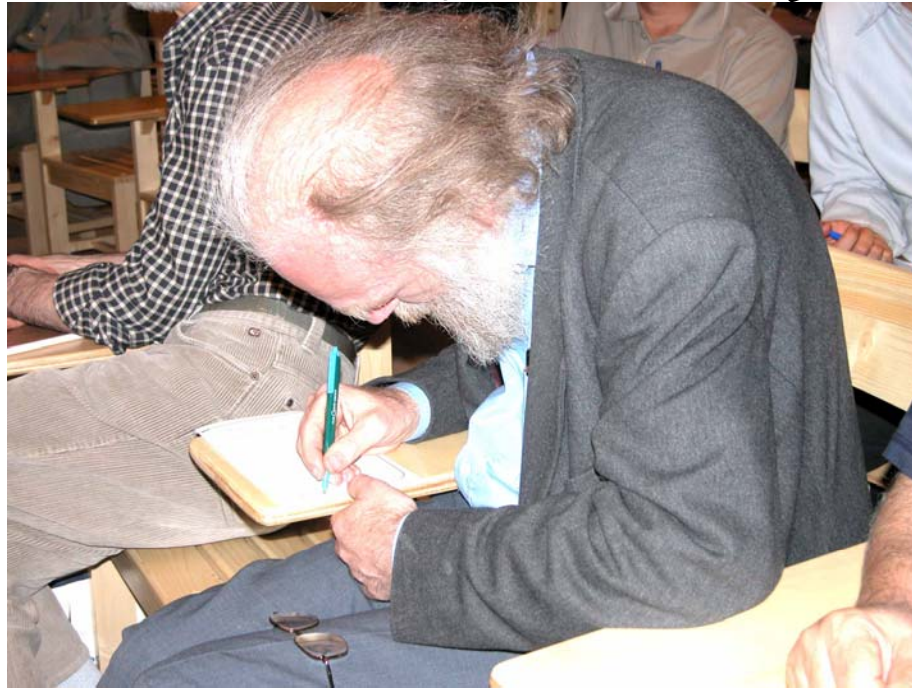
## Daily Program

9:00-10:00	10:00-10:30	10:30-11:30	11:30-12:00	12:00-12:30	12:30-14:00
W. Haemers (1)		B. D. McKay	D. A. Mojdeh	S. Zare Firoozabadi	jooje kabab (chiken kebab) 
14:00-15:00	15:00-15:30	15:30-16:00	16:00-17:00	19:00-21:00	
A. Blokhuis (2)		M. Zaker	B. Tayfeh- Rezaie		
					Conference Dinner

*Don't forget the Conference Dinner!*

Edited by: Esmat Yazdi  
 School of Mathematics, IPM  
 P. O. Box: 19395-5746  
 Phone: +98-21-22290928  
 Fax: +98-21-22290648  
 Email: [ipmmath@ipm.ir](mailto:ipmmath@ipm.ir)

# Picture of the Day



\*\*\*\*\*

