

# COE-SEMINAR

(in English)



## IT Applications, Computing Science, Computer Science, and Mathematics

Prof. Dines Bjorner

The date has been changed to  
**25<sup>th</sup> January (Thu.), 2007,**  
**13:30 – 15:30.**

In this talk I wish to discuss - also with the audience - the new universe of Informatics as it consists, in our opinion, of the confluence of IT applications, computing science, computer science and mathematics.

By computer science we understand the study and knowledge of the things that can exist inside computers (and across networks of these). By computing science we understand the study and knowledge of how to construct those things. By an IT application we mean an application of computers and networks in order to support activities in some domain. (We refrain from "defining" what is meant by mathematics!)

We will exemplify the span from IT applications "down" to mathematics and we will justify the role of formal techniques (built on mathematics) throughout. Thus we shall advance a new understanding of the sextet of relations between IT applications, computing science, computer science and mathematics.

We will then discuss the "state-of-affairs": For example (1) that some university curricula do not, in our opinion, reflect a proper understanding of the issues of and the sextet of relations between the quartet of informatics components; (2) that some "CS" researchers confuse the issues of computing science & computer science, and (3) that progress towards trustworthy software is hindered by (1) and (2).

**Title:** *IT applications, Computing Science, Computer Science, and Mathematics*

**Main Speaker:** Prof. Dines Bjorner, Research Professor of IS School of JAIST (2006);  
Fellow of ACM and IEEE; Member of Academia Europaea

**Date and Time:** **25<sup>th</sup> January (Thu.), 2007, 13:30 – 15:30**

**Place:** KS-Lecture Hall ( KS Building , 2<sup>nd</sup> Floor)

