TIFR Centre for Interdisciplinary Sciences
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Seminar

Visuospatial Learning in School Science

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Research in science education has developed over the last 50 years as a highly interdisciplinary enterprise, at the same time richly connected with the practice of science as well as of education. I will illustrate research at the Homi Bhabha Centre for Science Education using the example of visuospatial learning and reasoning in school science. Visuospatial challenges for thinking occur at very large and very small scales. Elementary astronomy and DNA structure are two such vastly different domains of school science where, surprisingly at first sight, similar cognitive issues are seen to occur and similar pedagogical tools are found effective. I will give a broad overview of these results.

Research in science education is needed in order to provide a reasoned basis for designing science education: be it new curricula, textbooks, lab courses or teaching methods. This research requires one to have a background in basic science, with an interest to explore cognitive and socio-cultural issues in education. Illustrating such research as above, I will broach the possibility of "science education" as a career option for young scientists.

Friday, May 9th 2014

10:30 AM (Tea/Coffee at 10:15 AM)

Seminar Hall, TCIS