

**Saturday 21 July 2018, 09:00-10:00**

**Room: Auditoria PA 113/PA 110**

*Theme 4: Mathematics and its relation to science, technology, and the arts: Historical issues and socio-cultural aspects in relation to interdisciplinary teaching and learning*

**The art and architecture of mathematics education – a study in metaphors**

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**Abstract**

In everyday discussions about mathematics, in popular media, press, or in educational contexts, phrases such as “mathematics is everywhere”, “mathematics is beautiful”, and even “mathematics is poetry” all point to the high esteem in which mathematics is held by some, and how they wish to portray it to those who (often) look at it in negative ways. On the other side of the argument, on the other bank of this “river” (to coin another phrase) we find many historical examples; one recent and certainly interesting one, coming from the Royal Commission on mathematics education in the UK undertaken in 2004, states that the two most common adjectives used by UK teenagers to describe mathematics were “boring” and “irrelevant”.

Can these two types of views of mathematics be reconciled and if so how? In this talk we will explore these diametrically opposed positions. We will do so through analysis of some metaphors as mentioned above, setting them within their historical contexts. We will illustrate these metaphors by interdisciplinary historical examples in order to paint a picture of mathematics and see it in different historical eras. Will we be able to design a bridge that will thus connect the two banks of this imaginary river, and what would be the implications for mathematics education if we were successful in our project?

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