Geometrisation as a didactic challenge

Ewa Swoboda, Uniwersytet Rzeszowski

Understanding mathematics as an abstract structure takes a long time. It begins in an attempt to understand and to describe the world around us. The perception of the world depends on many factors, and its description can take various forms. To orient the mind of children or a young person in general so that they can see the world through the eyes of a mathematician is a didactic challenge. So, what is the difference between looking at the world like a mathematician and regarding it like a physicist, not to mention like a writer or a sociologist? Are there people who possess this mathematical skill as an innate ability? And if not – can it be taught?

Mathematisation of the world intended to create geometric concepts and geometric reasoning is a special didactic challenge. At the present stage of didactic knowledge, we are convinced that this process differs from the one that leads to the creation of arithmetic concepts. During the lecture, I will present my own reflections on this subject, supported by examples of student's work.