



Keynote

DYNAMIC GEOMETRY AND MATHEMATICS: FEW TRAINS ON A TWO-WAY TRACK

Tomás Recio

Universidad de Cantabria, Santander, Spain

Dynamic geometry is designed as a helpful tool for mathematics comprehension. This can be thought as a single direction: from dynamic geometry to mathematics. But, conversely, some non elementary mathematics seem to be required to understand (and to improve) dynamic geometry performance.

Noticing this mutual interaction is neither very popular, nor strictly new (e.g. consider the paradigmatic case of Cinderella). On the other hand, we would argue in the talk how to trace back the origins of such interaction in order to include some fancy names such as, say, Babbage or Watt, ending up with Nash.... Yet, we think it is perhaps convenient to insist now and again on the importance of traveling back and forth along this two way track, for the benefit of mathematics education.

This would be the main idea in my lecture, exemplified by some situations I have been recently dealing with, in order to improve dynamic geometry features for locus computation and automatic theorem proving.