

A WORKSHOP ON COMPARATIVE GEOMETRY IN GENERAL EDUCATION

Workshop at the
venue of CERME13

Length of the
programme: 90 min

Price/person:
0 EUR

BASIC IDEA: Starting in lower grades of elementary school, students deal not only with the geometry of the Euclidean plane, but also with the geometry of the sphere simultaneously, side by side. They compare and contrast fundamental concepts in two different worlds of geometry, such as the straight line, perpendicular and parallel lines, distance, angle, area, polygons, triangles, quadrilaterals, etc. Later, in higher grades, the foundations of hyperbolic geometry on a hemisphere model can be added to the first two systems.

Recently, comparative geometry has shown a slow but steady spread in several countries. Most students enjoy the freedom of inquiry and independent thinking, but many math teachers are uncomfortable with mathematics *in statu nascendi* instead of ready-made definitions and formulas.

During the workshop, István Lénárt (inventor of [Lénárt Sphere](#)) will present an outline of the curriculum developed over the decades. Participants are free to choose between experimenting with hands-on tools or following the presentation and observing the activities of others.

Welcome to Ball Geometry!

