ALL TEACHERS

Hands-on II: Project Oriented

Summary

Participants will choose to belong to one of a small number of groups (up to 5 groups). Each group will work in a 'project' style mood, that is, focusing on some interesting specific question with a view to experience the insights provided by Geometric Algebra in its solution. The possible projects will be agreed upon by the Summer School Teachers and will be made public before the start of the Summer School. In this second Hands-on, each group will be introduced to the corresponding topic by one of the teachers and will give appropriate guidelines for thinking about it. To give an idea about what such projects may look like, here are a few indicative examples:

- GA computations in classical Euclidean geometry illustrated in some interesting case/s, as for example the nine-point circle and Euler's line of a triangle.
- Introduction to GA methods in 3D crystallography.
- Computations of the Lorentz transformations of the electro-magnetic field. Electromagnetic field of a moving point charge.
- Camera localization.