

## Seminar SAW

### Rethinking Practices and Cultures in the History of Science

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*Geometrical equations: a “cultural system”*

**Abstract** - Geometrical equations are mathematical objects which played a crucial role in the mechanisms of encounters between group theory and geometry in the second half of the 19th century. A striking fact about these equations is that they were no well-defined objects, although they were shared by a group of famous mathematicians (including Alfred Clebsch, Camille Jordan, Felix Klein, and Max Noether) who deployed very precise ways of doing to study them. The aim of my talk is to describe the special organization of knowledge associated to geometrical equations at the light of the definition of “culture” due to the sociologist Guy Rocher. More specifically, I will show how this definition actually led me to characterize that organization of knowledge as a “cultural system.” To bring things into perspective, I will also suggest that this cultural system may be interpreted as the product of an acculturation process between parts of an algebraic culture and a geometric culture of the 19th century.