ICHM Report Research in Progress – BSHM

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On 2 March 2024, I was lucky enough to give a talk entitled: "The reduction of singularities according to Max Noether and Georges-Henri Halphen: What did *more geometric* mean?" at a conference organised by the BSHM. This presentation is the result of research I carried out over a year and a half during my PhD at the Université Paris Cité, in the SPHERE laboratory, under the supervision of Karine Chemla and Patrick Popescu-Pampu. The conference consisted of 10 presentations, including mine, lasting 30 minutes (20 minutes presentation and 10 minutes for questions). Through this conference, the BSHM offers young researchers the opportunity to present their research and also to give them feedback on their presentations.

This event gave me the opportunity to meet several researchers, some of whom had questions close to my own. Indeed, we had the opportunity to listen to several presentations that included questions around the use of algebra and geometry, in a distinct way in most cases. My presentation was, as the name suggests, on this theme. What's more, every question I was asked after my presentation was useful, whether it concerned my research method, the intuition of my actors, or the questions I had after this short presentation.

The feedback and questions I received helped me to better understand certain expectations of my audience and to initiate certain conversations around my subject or adjacent subjects. I could take as examples: algebraic practice within geometry in the 19th century; the practice of geometry without drawing; the reception of mathematical texts by mathematicians with a different training from the author of the said text, and the study of the reformulations they offer; the explanation of the modernisation of certain methods to a public not necessarily trained in modern techniques.

I would like to thank the BSHM for giving me this opportunity and the ICHM for funding me to attend all these interesting talks.