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News and Notices

Montucla Prize 2017

Henrik Kragh Sørensen (Chair, 2017 Montucla Prize Committee)

Available online 16 October 2017

The Montucla Prize is awarded by the Executive Committee of the International Commission for the History of Mathematics every four years to the author of the best article by a junior scholar published in *Historia Mathematica* in the four years preceding the International Congress of History of Science, Technology and Medicine.

The EC of the ICHM forms a subcommittee consisting of the two co-editors of *Historia Mathematica* and a member of the EC acting as Chair of the Committee. That committee, after giving careful consideration to the papers published by junior scholars in *Historia Mathematica* in the pertinent period proposes a candidate to the EC for its consideration and vote.

The EC of the ICHM is proud to award the Montucla Prize for 2017 to

Jemma Lorenat for her article *Figures real, imagined, and missing in Poncelet, Plücker, and Gergonne* (Issue 42.2, 2015, pp. 155–192)

In her article, Lorenat analyses five versions of a single conic construction developed between 1817 and 1826 by Poncelet, Plücker, and Gergonne. She illustrates their differing methodologies, especially with relation to the status of diagrams in geometry. Lorenat builds upon work by Karine Chemla and others about generality in geometry and work by Dominique Tournès about the notion of "virtual diagram" which he has defined (2012) as a "diagram that one must have in mind, but that is no longer physically drawn on the paper, or at least which is left to the reader to draw". The study of the use of such diagrams opens up the question of the relationship between symbols, written speech, and visualization in mathematics. What Lorenat shows is that the failure of written descriptions (such as the reliance upon "imaginary points") to uniquely produce the intended figure introduces important aspects of generality, a feature often associated with algebra, rather than geometry. Through a painstaking textual analysis, Lorenat provides several examples in which the geometrical practices of Poncelet, Plücker, and Gergonne achieved an indirect mode of imagination, when some geometric forms could not be actually represented. What is especially admirable in this paper is Lorenat's mature and highly original road into historiographical issues concerning the role of diagrams, generality in mathematics, and mathematical practice that are high on the agenda of historians and philosophers of mathematics. Last but not least, it is a pleasure to read her lucidly written paper.

Also highly commended were (in chronological order of publication):

Alberto Cogliati *Early history of infinite continuous groups, 1883–1898* (Issue 41.3, 2014)

Figure 1. Jemma Lorenat, who gave birth to her son Kepler in July 2017 and was therefore unable receive the Montucla Prize in person when it was presented at the International Congress of History of Science, Technology and Medicine in Rio de Janeiro that same month.

and

Zhu Yiwen *Different cultures of computation in seventh century China from the viewpoint of square root extraction* (Issue 43.1, 2016)