1145-11-490   **Jan Vonk*** (`jan.vonk.jv@gmail.com`), Mathematical Institute, University of Oxford, Woodstock Road, Oxford, Oxfordshir OX2 6GG, United Kingdom. *Non-abelian Chabauty and rational points on curves.*

In this talk, I will report on some recent progress on the subject of the non-abelian method of Chabauty-Kim for the explicit determination of the set of rational points on curves of higher genus. In joint work with Jennifer Balakrishnan, Netan Dogra, Steffen Müller, and Jan Tuitman, this lead to the explicit determination of the rational points on the 'cursed' modular curve with non-split Cartan structure of level 13. (Received September 07, 2018)