Report about the visit to the Department of Mathematics, UiT-The Arctic University of Norway, for Camilla Hollanti and Ragnar Freij-Hollanti, Aalto University, Finland.

During 4 weeks in May-June 2022 we visited the Department of Mathematics, Campus Tromsø, at UiT. We were TMS-Guest Professors during the stay, with a partial grant from the Trond Mohn Foundation through the project Pure Mathematics in Norway. During the stay we exchanged experience and knowledge with Professor Trygve Johnsen, UiT, through several conversations and meetings. Our common field of interest was error-correcting codes, and combinatorics, in particular matroids, and in particular derived matroids.

  In addition to the purely research oriented meetings that we had, we gave two courses, each lasting 3 hours:

Ragnar Freij-Hollanti: Matroids, circuits, and derived matroids
        Tuesday 24.05, Tuesday 31.05, Wednesday 15.06
Camilla Hollanti: Coding theory for private information retrieval
        Monday 30.05, Monday 13.06, Wednesday 15.06
These lecture series were not independent of each other, since derived matroid play a role in studying private information retrieval. There were several students attending the lectures, and two of these (master) students have now chosen thesis topic within the theory of derived matroids, being supervised by our colleagues Johnsen and Hugues Verdure in Tromsø.

An extra bonus with visiting Tromsø during this period was being able to attend the Nordic Combinatorial Conference 2022

https://norcom2022.puremath.no/norcom/

where one of us also gave a lecture.