SIMON BLACKBURN, Royal Holloway University of London
Locally block-avoiding orderings of points

This talk is based on joint work with Tuvi Etzion, Technion.

Let n and ℓ be positive integers. Recent papers by Kreher, Stinson and Veitch have explored variants of the problem of ordering the points in a triple system (such as a Steiner triple system, directed triple system or Mendelsohn triple system) on n points so that no block occurs in a segment of ℓ consecutive entries. (Thus the ordering is locally block-avoiding.) I will describe a greedy algorithm which produces such orderings, provided n is sufficiently large when compared to ℓ. I will also talk about some related results and open problems.

Simon R. Blackburn and Tuvi Etzion, 'Block-avoiding point sequencings', *J. Combin. Des.* 29 (2021) 339-366.