

## **Maximal 3-wise intersecting families**

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**Zoom meeting ID: 897 3228 9081 Password: 121323**

**Link: <https://zoom.com.cn/j/89732289081>**

**Abstract:** A family  $F$  of subsets of  $\{1, 2, \dots, n\}$  is called maximal  $k$ -wise intersecting if every collection of at most  $k$  members from  $F$  has a common element, and moreover, no set can be added to  $F$  while preserving this property. In 1974, Erdős and Kleitman asked for the smallest possible size of a maximal  $k$ -wise intersecting family, for  $k \geq 3$ . We resolve this problem for  $k = 3$  and  $n$  even and sufficiently large.

This is joint work with Ben Lund, Kevin Hendrey, Casey Tompkins.