



## Institut für Diskrete Mathematik

## Vortrag im Seminar für Kombinatorik und Optimierung

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Seminarraum AE06, Steyrergasse 30, Erdgeschoss

## Supersaturation Problem for the Bowtie

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The Turán function ex(n, F) denotes the maximal number of edges in an F-free graph on n vertices. However once the number of edges in a graph on n vertices exceeds ex(n, F), many copies of F appear. We study the function  $h_F(n, q)$ , the minimal number of copies of F in a graph on n vertices with ex(n, F) + q edges. The value of  $h_F(n, q)$  has been extensively studied when F is colour critical. In this paper we consider a simple non-colour-critical graph, namely the bowtie and establish bounds on  $h_F(n, q)$  when  $q = o(n^2)$ .

This is joint work with Mihyun Kang and Oleg Pikhurko.

Mihyun Kang