Transversal embeddings

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(This talk is based on joint work with Yangyang Cheng.)

A classical question in graph theory is to find sufficient conditions which guarantee that a graph G contains a given spanning subgraph H. A colourful variant of this problem has graphs $G_1, \ldots, G_s$ on the same vertex set, where $s \geq e(H)$ and we think of each graph as having a different colour, and the goal is to find a *transversal* (or *rainbow*) copy of H that contains at most one edge from each graph G_i. I will survey this area and its proof techniques, and will discuss some joint work with Yangyang Cheng on regularity tools in this setting.