Decompositions of Prisms into Matchings

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If $G$ is any graph, a $G$-decomposition of a host graph $H = (V, E)$ is a partition of the edge set of $H$ into subgraphs of $H$ which are isomorphic to $G$. The subgraphs induced by the parts of the edge decomposition are called blocks. The decomposition graph of a $G$-decomposition is the vertex intersection graph of the blocks. In this talk we will study the case of regular decomposition graphs where the prototype $G$ is a matching and the host $H$ is a prism.

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