On the Graph of Modules over Commutative Rings

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Let M be a module over a commutative ring and let $Spec(M)$ be the collection of all prime submodules of M. We topologize $Spec(M)$ with quasi-Zariski topology and for a subset T of $Spec(M)$, we introduce a new graph $G(\tau_T^*)$, called the quasi-Zariski topology-graph. It helps us to study algebraic (resp. topological) properties of M (resp. $Spec(M)$) by using graph theoretical tools. Also we study the annihilating-submodule graph and investigate the relation between these two graphs. This talk is based on joint work with H. Ansari-Toroghy.