COSUPPORT: FROM ORIGINS TO OPEN QUESTIONS

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ABSTRACT. In a commutative ring R, an important property of a module is that of "support," a subset of the topological space $\operatorname{Spec}(R)$. Support can be used to classify "nice" subcategories of the category of R-modules by identifying them with certain subsets of $\operatorname{Spec}(R)$. We will follow how the progression of this idea leads to the notion of cosupport, as well as give a number of examples of cosupport and related open questions.