

SEMINARIO DI GEOMETRIA

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Dipartimento di Scienze Matematiche,
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On the fundamental groups of normal varieties

After some generalities on fundamental groups of complex algebraic varieties, I will recall the results due to Beauville, Arapura, Papadima, Suciu and myself on the relations of $\pi_1(X)$ in the case of a smooth variety X to pencils $f : X \rightarrow C$, characteristic varieties associated to rank one local systems on X and resonance varieties in $H^*(X)$.

Finally I will discuss the extension of these results to the case X normal due to Arapura, Hain and myself and I will state a number of open questions.