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Universal spaces in birational algebraic geometry

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One of the most important ideas in topology is the idea of universal space and universal class for a contravariant functor. In my talk I will discuss our joint results with Yuri Tschinkel which show how this general scheme can be applied to the theory of cohomological birational invariants of projective varieties. Most of the results are currently established for projective varieties defined over finite fields but I am going to discuss also possible extension of the theory to projective varieties defined over fields in zero characteristic.

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