

Holonomic \mathcal{D} -modules and positive characteristic[★]

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Abstract. We discuss a hypothetical correspondence between holonomic \mathcal{D} -modules on an algebraic variety X defined over a field of zero characteristic, and certain families of Lagrangian subvarieties in the cotangent bundle to X . The correspondence is based on the reduction to positive characteristic.

Keywords and phrases: rings of differential operators and their modules, characteristic p methods

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