



## Quantum Serre theorem as a duality between quantum D-modules

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Résumé en anglais	<p>We give an interpretation of quantum Serre of Coates and Givental as a duality of twisted quantum D-modules. This interpretation admits a non-equivariant limit, and we obtain a precise relationship among (1) the quantum D-module of <math>X</math> twisted by a convex vector bundle <math>E</math> and the Euler class, (2) the quantum D-module of the total space of the dual bundle <math>E^* \rightarrow X</math>, and (3) the quantum D-module of a submanifold <math>Z \subset X</math> cut out by a regular section of <math>E</math>. When <math>E</math> is the anticanonical line bundle <math>K^{-1} X</math>, we identify these twisted quantum D-modules with second structure connections with different parameters, which arise as Fourier-Laplace transforms of the quantum D-module of <math>X</math>. In this case, we show that the duality pairing is identified with Dubrovin's second metric. CONTENTS</p>
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Titre abrégé	Int. Math. Res. Not.

### Liens

- [1] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=26882>
- [2] <http://okina.univ-angers.fr/etienne.mann/publications>
- [3] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=26884>
- [4] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=23083>
- [5] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=23091>

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[8] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=23084>

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[10] <http://dx.doi.org/10.1093/imrn/rnv215>

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