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# AROUND DEFORMATION QUANTIZATION

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## Abstract

First, I will explain two different proofs of the existence of deformation quantization of the functions on the Poisson manifold due to M.Kontsevich and D.Tamarkin. Second I will explain the complexity of this problem and the equivalence of this two proofs. Third, I will introduce the Grothendieck-Teichmuller group and its action on the set of quantizations. Finally, I will translate everything to the language of operads and state the known and open questions around.

The talk is based on the works of Kontsevich, Tamarkin and Willwacher and their collaborators.

### Thursday, 6 December 2018:

17:30 - 18:30: Lecture 1

18:30 - 18:45: Break

18:45 - 19:45: Lecture 2

### Friday, 7 December 2018:

17:30 - 18:30: Lecture 3

18:30 - 18:45: Break

18:45 - 19:45: Lecture 4

**Place :** IMBM Seminar Room, Boğaziçi University South Campus