

# Application of Floer theory for Lagrangian cobordisms

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I will recall the construction of the Floer complex associated to two Lagrangian cobordisms between Legendrian submanifolds which we can build when the negative ends of the cobordisms admits augmentations. I will then study the action filtration on this complex to show that in some situation it leads to some interesting exact sequences relating Legendrian invariants to symplectic invariant of the cobordisms. I will give an overview of applications of this considerations to Floer homology, positive Legendrian isotopies and the topology of Lagrangian cobordisms. I will allow myself to speculate on more general settings where this complex can be useful.

*This will report on joint works with Vincent Colin, Georgios Dimitroglou-Rizell, Paolo Ghiggini and Roman Golovko.*