

## **Bilinearized Legendrian contact homology**

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### **Abstract:**

Legendrian contact homology (LCH) is a powerful holomorphic curves invariant for Legendrian submanifolds in contact manifolds. It is defined via a differential graded algebra (DGA), but the computation of its homology is often too difficult. Augmentations of this DGA are then used to obtain a linearized complex; its homology is called linearized LCH. In this talk, we show how pairs of augmentations can be used to define a bilinearized version of LCH, which is a refinement of the linearized LCH. These algebraic constructions will be illustrated with geometric interpretations and applications. This is a joint work with Baptiste Chantraine.