

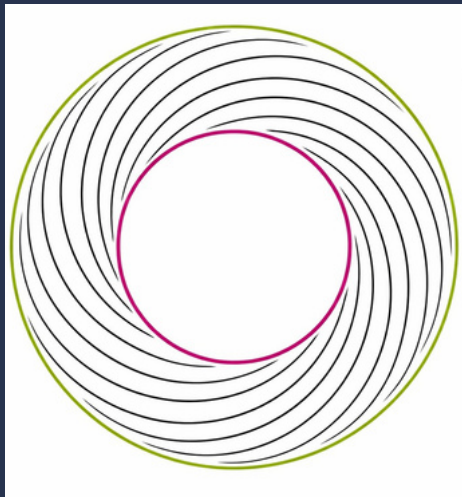
Gabriel Cramer

Geometry Lectures 2026

May 11, 12 and 13

UNIGE Section of Mathematics &
Fondation Boninchi

INVARIANTS OF OPEN CONTACT MANIFOLDS AND CONTACTOMORPHISMS



$$C\mathbb{H}A(X) = \lim_{\substack{\rightarrow \\ V_1 \subset X}} \lim_{\substack{\rightarrow \\ V \subset \text{Int } V_1}} \lim_{\substack{\leftarrow \\ \varepsilon \rightarrow 0}} \lim_{\substack{\rightarrow \\ f \rightarrow 0}} C^{<\varepsilon}\mathbb{H}A(X; V, f\alpha).$$

Prof. Yakov
ELIASHBERG
(Stanford)



Since the groundbreaking work of M. Gromov in 1980s there were developed many tools for distinguishing open symplectic domains. Till recently, similar questions in the contact geometric setup were largely open. For instance, it was not known whether there are open domains in the standard contact sphere of dimension >3 which are diffeomorphic but not contactomorphic to the standard contact vector space (in dimension 3 it is known that all of them are).

In my lectures I will develop Floer theoretic tools for answering this type of questions. As one of applications I will construct a continuous family of pairwise non-contactomorphic open balls in the standard contact \mathbb{R}^5 . An important role plays the new theory of contact convexity pioneered in the work of Honda and Huang. The lectures are based on 2 joint work in progress of the speaker, one with J. Chaidez and D. Pancholi, and the other with K. Ajjj, M. Mj, D. Pancholi and L. Polterovich.

SCHEDULE

Monday, May 11 at 15:10, room 1-15 ⚠(room change)

Tuesday, May 12, at 15:10, 8th floor

Wednesday, May 13, at 15:10,
Fondation Boninchi

REGISTRATION

Registration is required on Day 3
as capacity of the venue is limited.

Register online by April 30