**IC3 2019 Winter Retreat**

February 14-15, 2019 Congress Centre Kursaal Interlaken, Strandbadstrasse 44, 3800 Interlaken, Switzerland

IC3 faculty, students, sponsors and guests gather at IC3 Retreats to discuss the major technical challenges, issues and innovative solutions to widespread blockchain adoption. The 2019 Winter Retreat is in Switzerland with our IC3 colleagues from ETH Zurich and EPFL, as well as all other IC3 campuses (Cornell, Cornell Tech, UC Berkeley, UCL, UIUC, and the Technion).

The Retreat is on February 14-15, and co-located at Interlaken with the [Swiss Blockchain Winter School](https://blockchainschool.epfl.ch) on February 11-14, but is a totally separate event.

Registration for the Retreat is now closed. Please see the agenda below, and check back later for a summary of the event.



 Congress Centre Kursaal Interlaken in Interlaken, Switzerland

IC3 Winter Retreat Agenda

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| **Thursday**8:00 - 8:45  |   Continental Breakfast |
| 8:45 - 9:00 | Welcome - Ari Juels |
| 9:00 - 10:00 | Blockchains at Scale I - 10 minute talks (8 minutes + QA) |
|  | Cristina Basescu - Low-latency and locality-preserving blockchains Oded Naor - Teechain: A Secure Asynchronous Blockchain Payment NetworkPatrick McCorry - Scaling Cryptocurrencies via State ChannelsMustafa Al-Bassam - Replay attacks against cross-shard communication protocolsYan Ji - Amplification of selfish mining in fraud-proof based blockchains |
| 10:00 - 10:30 | Break - 30 mins |
| 10:30 - 11:10 | Blockchain at Scale II - 10 minute talks (8 minutes + QA) |
|  | Enis Ceyhun Alp - Heterogeneous sharded blockchain architectureKarl Wust - ZLiTE: Lightweight Clients for Shielded Zcash Transactions using Trusted ExecutionSergi Delgado Segura - TxProbe: Discovering Bitcoin's Network Topology Using Orphan TransactionsSurya Bakshi - Erays: Reverse Engineering Ethereum's Opaque Smart Contracts |
| 11:10 - 12:00 | Start-ups emerging from IC3 - 10 minute talks (8 minutes + QA)  |
|  | Sergey Nazarov - Town Crier and Decentralised OraclesKevin Sekniqi - Avalanche Noah Johnson - Oasis LabsSoumya Basu - bloXroute  |
| 12:00 - 13:30 | Lunch |
| 13:30 - 14:30 | Cryptography and Zero Knowledge - 10 minute talks (8 minutes + QA)  |
|  | Jiaheng Zhang  & Tiancheng - Faster zero-knowledge interactive proofsMary Maller - Improvements to Updatable CRS Samarth Kulshreshtha - Scaling Asynchronous Multi-Party Computation: A Systems PerspectiveKevin Liao - A Calculus for Composable, Computational CryptographyTom Yurek - Client-efficient Asynchronous Verifiable Secret Sharing and Anonymous BroadcastKrishna Deepak Maram Lun Wang - CHURP: CHUrn-Robust Proactive secret sharing |
| 14:30 - 15:00 | Break - 30 minutes |
| 15:00 - 15:45 | Panel: Too much infrastructure, not enough use-cases/usability studies?  |
| 15:45 - 17:00 | Industry and Community Use Cases - 10 minute talks (8 minutes + QA) |
|  | Dahlia Malkhi - Consensus ProtocolsAngelo De Caro - Hyperledger Fabric UpdateMichael Steiner - Intel and SGX UpdateJorge Cuellar - SiemensBob McElrath - Fidelity Sascha Hanse - AeternityNicola Greco - Protocol LabsSimon Meier - Digital Asset HoldingsChristine Moy - JP Morgan  |
| 17:00 - 18:00 | Networking Reception |
| 18:00 -  | Dinner |

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| **Friday** 7:15 - 8:00  |   Continental Breakfast  |
| 8:00 – 9:00 | Proof-of-Personhood (Audience Participation Session) |
| 9:00 - 10:00  | Consensus Protocols (Attacks, Defense, Models) - 10 minute talks (8 minutes + QA) |
|  | Kevin Negy & Sishan Long - Selfish MiningItay Tsabary - Gap game Sanket Kanjalkar - “I Can’t Believe It’s Not Stakes” Jian Liu - Saber: sharding by separating execution from consensusEthan Cecchetti - PIES and Proof of Replication Phil Daian - The Dark Side of Blockchain - HFT, Bribery, Consensus Attacks, and More |
| 10:00 - 10:30 | Break - 30 mins |
| 10:30 - 11:40 | Reinforce Industrial use cases - 10 minute talks (8 minutes + QA) |
|  | Elefteris Kokoris-Kogias - Calypso on-chain secrets & policy enforcementTyler Kell - Lib-submarineKai Mast - Sharding blockchainsAlex Manuskin - Client Architecture  |
| 11:40 - 12:00  | Standup of New Ideas and Research Directions |
| 12:00 - 12:15 | Closing Remarks  |