

# Winter School on Bilinear Pairings in Cryptography

**Location:** Wohl Center, Bar-Ilan University

**School organizer:** Yehuda Lindell

Monday, February 4, 2013 – Background to Elliptic Curves	
9:00 am to 9:30 am	<b>Registration</b>
9:30 am to 9:35 am	Opening remarks – Yehuda Lindell
9:35 am to 10:00 am	School overview – Dan Boneh
10:00 am to 11:30 am	The basics of elliptic curves – Nigel Smart
11:30 am to 12:00 pm	<i>Coffee break</i>
12:00 pm to 1:30 pm	The discrete log problem on elliptic curves – Nigel Smart
1:30 pm to 3:00 pm	<i>Lunch</i>
3:00 pm to 4:30 pm	Applications of elliptic curves to cryptography – Nigel Smart
4:30 pm to 5:00 pm	<i>Coffee break</i>
5:00 pm to 5:45 pm	Tutorial (QA session in small groups)
6:00 pm	<i>Bus to hotel and Tel Aviv</i>
Tuesday, February 5, 2013 – Pairings and Applications	
9:30 am to 10:30 am	The basics of pairings – Dan Boneh
10:30 am to 11:00 am	Identity-based encryption and variants – Dan Boneh
11:00 am to 11:30 am	<i>Coffee break</i>
11:30 am to 1:00 pm	Identity-based encryption and variants (continued) – Dan Boneh
1:00 pm to 2:30 pm	<i>Lunch</i>
2:30 pm to 4:30 pm	Attribute-based encryption – Allison Bishop Lewko
4:30 pm	<i>Tour in the old city of Jaffa (including refreshments)</i>
8:00 pm	<i>Dinner at Meatos Restaurant, Tel Aviv</i>

Wednesday, February 6, 2013 - Applications	
9:30 am to 10:30 am	Broadcast encryption and traitor tracing – Dan Boneh
10:30 am to 10:45 am	Short break
10:45 am to 11:45 am	Functional encryption – Allison Bishop Lewko
11:45 am to 12:15 pm	Coffee break
12:15 pm to 1:15 pm	Non-interactive zero knowledge – Jens Groth
1:15 pm to 3:00 pm	Lunch
3:00 pm to 4:00 pm	Non-interactive zero knowledge from pairings – Jens Groth
4:00 pm to 4:30 pm	Coffee break
4:30 pm to 5:30 pm	Non-interactive zero knowledge from pairings (continued) – Jens Groth
5:45 pm	Bus to hotel and Tel Aviv
Thursday, February 7, 2013 – Applications and How Pairings Work	
9:30 am to 10:30 am	Anonymous credentials and eCash – Anna Lysyanskaya
10:30 am to 10:45 am	Short break
10:45 am to 11:45 am	Anonymous credentials and eCash (continued) – Anna Lysyanskaya
11:45 am to 12:00 pm	Short coffee break
12:00 pm to 1:00 pm	How pairings work – Florian Hess
1:00 pm to 2:30 pm	Lunch
2:30 pm to 4:00 pm	How pairings work and how to compute them efficiently – Florian Hess
4:00 pm to 4:30 pm	Coffee break
4:30 pm to 6:00 pm	How pairings work and how to compute them efficiently (cont.) – Florian Hess
6:00 pm	Farewell and bus to hotel

We thank the European Research Council and Bar-Ilan University for their financial support.

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