

Summer School on
“the Arithmetic of the Langlands Program”

May 8 - 12, 2023

organized by

Frank Calegari (Chicago), Ana Caraiani (Bonn/London), Laurent Fargues (Jussieu),
Peter Scholze (Bonn)

Time measurement: CEST

• Monday, May 8

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| 08:30 - 09:05 | <i>Arrival and Registration</i> |
| 09:05 - 09:15 | <i>Welcome by HIM Director Christoph Thiele</i> |
| 09:15 - 10:30 | Judith Ludwig <i>p-adic Geometry, 1: Adic and perfectoid spaces</i> |
| 10:30 - 11:00 | <i>Coffee break</i> |
| 11:00 - 12:15 | Xinwen Zhu <i>Categorical local Langlands, 1</i> |
| 12:15 - 13:45 | <i>Lunch break</i> |
| 13:45 - 14:45 | Cong Xue <i>Shtukas, 1</i> |
| 15:00 - 16:00 | Patrick Allen <i>Automorphy Lifting, 1</i> |

• Tuesday, May 9

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| 09:00 - 10:30 | George Boxer <i>p-adic Automorphic Forms, 1</i> |
| 10:30 - 11:15 | <i>Group Photo and Coffee break</i> |
| 11:15 - 12:30 | Cong Xue <i>Shtukas, 2</i> |
| 12:30 - 13:45 | <i>Lunch break</i> |
| 13:45 - 15:00 | Judith Ludwig <i>p-adic Geometry, 2: Topologies, diamonds and the Fargues–Fontaine curve</i> |

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| 15:00 - 15:30 | <i>Coffee break</i> |
| 15:30 - 16:30 | Toby Gee <i>Categorical local Langlands, 2</i> |
| 16:45 - 17:45 | Arthur-César le Bras <i>p-adic Geometry, 3: Vector bundles on the Fargues-Fontaine curve</i> |
| 17:45 - 19:30 | <i>Reception in Plücker hall</i> |

• **Wednesday, May 10**

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|---------------|---|
| 09:00 - 10:30 | Eva Viehmann <i>Shtukas, 3</i> |
| 10:30 - 11:00 | <i>Coffee break</i> |
| 11:00 - 12:30 | James Newton <i>Automorphy Lifting, 2</i> |

• **Thursday, May 11**

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|---------------|---|
| 09:00 - 10:30 | Vincent Pilloni <i>p-adic Automorphic Forms, 2</i> |
| 10:30 - 11:00 | <i>Coffee break</i> |
| 11:00 - 12:30 | Toby Gee <i>Categorical local Langlands, 3</i> |
| 12:30 - 14:00 | <i>Lunch break</i> |
| 14:00 - 15:00 | Patrick Allen <i>Automorphy Lifting, 3</i> |
| 15:00 - 16:00 | Arthur-César le Bras <i>p-adic Geometry, 4: Banach-Colmez spaces</i> |
| 16:00 - 16:30 | <i>Coffee break</i> |
| 16:30 - 17:30 | Eva Viehmann <i>Shtukas, 4</i> |
| 18:00 | Conference Dinner <i>Brauhaus Bönnsch, Sterntorbrücke 4 - https://www.boennsch.de/</i> |

• **Friday, May 12**

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|---------------|--|
| 09:00 - 10:30 | James Newton <i>Automorphy Lifting, 4</i> |
| 10:30 - 11:00 | <i>Coffee break</i> |
| 11:00 - 12:30 | Lue Pan <i>p-adic Automorphic Forms, 3</i> |

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| 12:30 - 14:00 | | <i>Lunch break</i> |
| 14:00 - 15:00 | | Xinwen Zhu <i>Categorical local Langlands, 4</i> |