

# Touchard Pierre

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🌐 <https://pierretouchard.weebly.com/>

## Employment History

- December 2022 – September 2023 **Postdoctoral researcher** at the department of mathematics at the university of KU Leuven. Tutor: Prof. Raf Cluckers.
- December 2020 – December 2022 **Postdoctoral researcher** at the department of mathematics and physics of the University of Campania Luigi Vanvitelli, Caserta. Grant: VALERE - Goal. Tutor: Prof. Paola D'Aquino.
- September 2016 – December 2019 **Wissenschaftlicher Mitarbeiter (Research assistant)** within the CRC 878 "Groups, Geometry & Actions", Münster.

## Scholarship

- November 2020 – December 2020 **Oberwolfach Research Fellowship** Research stay at the Mathematisches Forschungsinstitut Oberwolfach.
- January 2020 – May 2020 **Kurzstipendien für Doktoranden (Short scholarship for PhD students)** Research visit in UCLA, funded by DAAD. Host: Prof. Chernikov.

## Education

- 2016 – 2020 **Ph.D., University of Münster, Germany** in Model Theory.  
Thesis title: *On Transfer Principles in Henselian Valued Fields*.  
Supervisor : Prof. Martin Hils.
- 2015 – 2016 **Master 2: Mathematical logic and foundations of computer science, University Paris-Diderot, France** .  
Master thesis: Artin-Schreier extensions in NIP and NTP<sub>2</sub> theories.  
Supervisor : Prof. Martin Hils.
- 2014 – 2015 **Master 2: Mathematics, training for Agrégation, University of Bordeaux, France.**  
*Admitted to the Agrégation (French mathematics teaching examination)*. National rank: 74.
- 2013 – 2014 **Master 1: Mathematics for research, University of Bordeaux, France.**
- 2010 – 2013 **Bachelor's degree in mathematics, University of Poitiers, France.**

## Teaching & Conference Organisation

- February 2023 - June 2023 **Advisor** of three bachelor thesis on model theory of chains.
- December 2019 – December 2022 **Co-tutor** of the PhD thesis of Anna De Mase. Advisor: Prof. Paola D'Aquino.
- Winter 2022 **Organiser** of the logic seminar of Caserta.
- September 2022 **Local-organizer** of the conference "Aila 2022: XXVII Incontro Di Logica", Caserta.
- June 2022 **Local-organizer** of the conference "Model Theory and Applications 2022", Cetraro.
- Summer 2022 **Co-Organiser** of the logic seminar of Caserta.
- Winter 2021/22 **Co-organiser** of a reading group on 'Enriched Modules'.

## Teaching & Conference Organisation (continued)

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Summer 2021	📖 <b>Mini-course</b> on Classification Theory.
Winter 2019/20	📖 <b>Assistant</b> for a student seminar on 'Metastable theories'.
Summer 2019	📖 <b>Assistant</b> for a student seminar on continuous logic.
Winter 2018/19	📖 <b>Tutor</b> for a Master course "Logic III" on NIP theories.

## Research Publications

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### Preprint

- 1 Meir, N., Papadopoulos, A., & **Touchard, P.** (2023). Generalised indiscernibles in products of structures [in preparation].
- 2 Linzi, A., & **Touchard, P.** (2022). On the hyperfields associated to valued fields [e-print:2211.05082, arXiv].
- 3 **Touchard, P.** (2022). Stably embedded ordered abelian groups [in preparation].
- 4 **Touchard, P.** (2021). Transfer principles in valued vector spaces [e-print:2111.15516, arXiv].
- 5 **Touchard, P.** (2020a). Burden in henselian valued fields [e-print:1811.08756, arXiv, To appear in APAL].
- 6 **Touchard, P.** (2020b). Stably embedded submodels of henselian valued fields [e-print:2005.02363, arXiv, To appear in AFML].

### Thesis

- 1 **Touchard, P.** (2020c). *Transfer principles in henselian valued fields* (Doctoral dissertation). University of Münster.











## Talks

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- 14/09/2022 📖 **Aila Meeting 2022: Incontro di Logica**  
**Title:** Ax-Kochen-Ershov principles for valued abelian structures
- 27/05/2022 📖 **Logic Seminar, University of Pisa**  
**Title:** Stably Embedded Ordered Abelian Groups
- 25/03/2022 📖 **Second Graduate students' workshop on algebra, logic and analysis, University of Szczecin**  
**Title:** Stably Embedded Ordered Abelian Groups
- 13/01/2022 📖 **BPGMTC 2022 - (Online)**  
**Title:** Relative Quantifier Elimination in Valued Vector Spaces
- 01/11/2021 📖 **Padova-Szczecin online seminar**  
**Title:** On Model Theory of the RV-sort of Valued Fields
- 30/09/2021 📖 **Logic Seminar, Naples**  
**Title:** On Model Theory of Valued Vector Spaces and their Skeletons
- 15/04/2021 📖 **Logic Seminar, Caserta**  
**Title:** On Stably Embedded Submodels

## Talks (continued)

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- 17/12/2020  **Logic Seminar, Caserta**  
Title: Burden and reduction principles for pure short exact sequences of abelian groups.
- 14/02/2020  **Logic Seminar, UCLA**  
Title: Burden in pure short exact sequences of abelian groups.
- 24/10/2019  **Oberseminar Model theory, University of Münster**  
Title: Burden in pure short exact sequences of abelian groups.
- 25/09/2019  **DMV-Jahrestagung 2019, Karlsruher Institut für Technologie**  
Title: Ax-Kochen-Ershov principle and classification of theories of Henselian valued fields.
- 01/06/2019  **Graduate students' workshop on algebra, logic and analysis, University of Szczecin**  
Title: Henselian valued fields and their RV-sorts.
- 18/04/2019  **Oberseminar Model theory, University of Münster**  
Title: Stably embedded elementary submodels and Henselian valued fields.
- 17/01/2019  **British PostGraduate Model Theory Conference 2019, Manchester University**  
Title: Burden in Henselian valued fields.
- 30/11/2018  **Münster-Düsseldorf Seminar GeSAMT, University of Münster**  
Title: Burden in mixed characteristic Henselian valued fields.
- 03/05/2018  **Oberseminar Model theory, University of Münster**  
Title: Henselian valued fields, burden and RV-sorts.
- 19/12/2016  **Oberseminar Model theory, University of Münster**  
Title: Henselian valued fields of equicharacteristic 0 and inp-minimality.