Leandro Vendramin

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Education

2010: Ph.D. in Mathematics. Universidad de Buenos Aires, Argentina. Advisor: M. Graña.

2004: Licenciado en Cs. Matemáticas. Universidad de Buenos Aires, Argentina.

Positions

2021: Associate professor. Vrije Universiteit Brussel, Belgium.

2019–2021: Visiting Assistant Professor of Mathematics. New York University, Shanghai, China.

2014–2021: Assistant Professor. Universidad de Buenos Aires, Argentina.

2012–2021: Researcher. Consejo Nacional de Investigaciones Científicas y Técnicas, Argentina.

2012–2018: Regular Associate. Abdus Salam International Centre for Theoretical Physics. Trieste, Italy.

Prizes and fellowships

2025: Ferran Sunyer i Balaguer Prize (with F. Cedó).

2018: Alexander von Humboldt fellowship (3 months). Host: I. Heckenberger.

2017: Postdoctoral fellowship (4 months), ERC Advanced Grant 320974. Host: A. Smoktunowicz.

2016: Argentinian Academy of Sciences – Young researcher award.

2012: Alexander von Humboldt fellowship (12 months). Host: I. Heckenberger.

2011: DAAD short-term postdoctoral fellowship (4 months).

2010: Conicet postdoctoral fellowship (24 months).

2009: DAAD short-term fellowship (3 months).

2005: Conicet Ph.D. fellowship (60 months).

Selected publications

- [1] I. Heckenberger, E. Meir, and L. Vendramin. Finite-dimensional Nichols algebras of simple Yetter–Drinfeld modules (over groups) of prime dimension. *Adv. Math.* 444 (2024), Paper No. 109637. DOI: 10.1016/j.aim.2024.109637.
- [2] E. Jespers, Ł. Kubat, A. Van Antwerpen, and L. Vendramin. Radical and weight of skew braces and their applications to structure groups of solutions of the Yang-Baxter equation. *Adv. Math.* 385 (2021), Paper No. 107767, 20. DOI: 10.1016/j.aim.2021.107767.
- [3] F. Cedó, A. Smoktunowicz, and L. Vendramin. Skew left braces of nilpotent type. *Proc. Lond. Math. Soc.* (3) 118.6 (2019), pp. 1367–1392. DOI: 10.1112/plms.12209.
- [4] A. Smoktunowicz and L. Vendramin. On skew braces (with an appendix by N. Byott and L. Vendramin). *J. Comb. Algebra* 2.1 (2018), pp. 47–86. DOI: 10.4171/JCA/2-1-3.
- [5] L. Guarnieri and L. Vendramin. Skew braces and the Yang-Baxter equation. Math. Comp. 86.307 (2017), pp. 2519–2534.DOI: 10.1090/mcom/3161.
- [6] I. Heckenberger and L. Vendramin. A classification of Nichols algebras of semisimple Yetter-Drinfeld modules over non-abelian groups. *J. Eur. Math. Soc. (JEMS)* 19.2 (2017), pp. 299–356. DOI: 10.4171/JEMS/667.
- [7] I. Heckenberger and L. Vendramin. The classification of Nichols algebras over groups with finite root system of rank two. *J. Eur. Math. Soc. (JEMS)* 19.7 (2017), pp. 1977–2017. DOI: 10.4171/JEMS/711.
- [8] V. Lebed and L. Vendramin. Homology of left non-degenerate set-theoretic solutions to the Yang-Baxter equation. *Adv. Math.* 304 (2017), pp. 1219–1261. DOI: 10.1016/j.aim.2016.09.024.

The full list of publications is available on my webpage.

Talks

The full list of talks, including slides and videos, is available on my webpage.

Editorial activity

2024: Open Mathematics

2023: Bulletin of the Belgian Mathematical Society - Simon Stevin.

Grants (selection)

2023: G004124N. Fonds Wetenschappelijk Onderzoek (FWO) – Vlaanderen. Belgium (310000 EUR).

2021: OZR3762. Vrije Universiteit Brussel, Belgium (100000 EUR).

Conferences organized (selection)

10/2025: Overwolfach mini-workshop (2544b): The Yang–Baxter Equation and Representations of Braid Groups. Organizers: I. Colazzo, J. Plavnik, E. Rowell, L. Vendramin.

06/2025: The Yang-Baxter equation and all that. Bedlewo, Poland. Organizers: I. Colazzo, T. Brzezinski, L. Vendramin.

04/2025: Hopf algebras, quantum groups, monoidal categories and related structures, Brussels, Belgium. Organizers: S. Caenepeel, K. De Commer, P. Saracco, P. Vaz, L. Vendramin, J. Vercruysse.

05/2024: Banff Workshop (24w5201): Skew Braces, Braids and the Yang-Baxter Equation. Organizers: I. Colazzo, J. Plavnik, E. Rowell, L. Vendramin. Alberta, Canada.

01/2024: Oberwolfach mini-workshop (2405b): Bridging number theory and Nichols Algebras via deformations. Organizers: G. Carnnovale, I. Heckenberger, L. Vendramin. Germany.

06/2023: Groups, rings and the Yang–Baxter equation. Organizers: I. Colazzo, A. Van Antwerpen, L. Vendramin. Blankenberge, Belgium.

02/2023: Oberwolfach mini-workshop (2309a): Skew braces and the Yang–Baxter equation. Organizers: T. Brzezinski, I. Colazzo, A. Doikou, L. Vendramin. Germany.

07/2022: The algebra of the Yang–Baxter equation. Organizers: I. Colazzo, J. Okninski, L. Vendramin. Stefan Banach International Mathematical Center, Bedlewo, Poland.

09/2019: Oberwolfach mini-workshop (1946a): Algebraic tools for solving the Yang-Baxter equation. Organizers: E. Jespers, V. Lebed, W. Rump, L. Vendramin. Germany.

See my research team's webpage for other conferences I organized.

Mentoring

Current Ph.D. students

 $\textbf{2025} \hbox{: Lukas Simons. Cosupervised with J. Vercruysse.}$

2024: Yufei Qin. Cosupervised with G. Zhou

2024: Charlotte Roelants. Cosupervised with K. Piterman.

2023: Davide Ferri. Cosupervised with A. Ardizzoni.

2022: Silvia Properzi.

2021: Thomas Letourmy. Cosupervised with J. Vercruysse.

2021: Senne Trappeniers. Cosupervised with A. Van Antwerpen.

2019: Santiago Ramírez. Universidad de Buenos Aires.

2018: Emiliano Acri. Universidad de Buenos Aires.

Former Ph.D. students

2022: Charlotte Verwimp. Cosupervised with E. Jespers.

Current postdocs.....

Magdalena Wiertel, Andrew Darlington, Kevin Piterman.

Former postdocs.....

Carsten Dietzel, Marco Bonatto.