# **Leandro Vendramin**

#### **Education**

**2010**: Ph.D. in Mathematics. Universidad de Buenos Aires, Argentina. Thesis: Nichols algebras over non-abelian groups. 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: Profesor adjunto. Universidad de Buenos Aires, Argentina.

**2012–2018**: Regular associate of the Abdus Salam International Centre for Theoretical Physics (ICTP). Trieste, Italy.

### **Selected publications**

- [1] 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". In: *Adv. Math.* 385 (2021), Paper No. 107767, 20. ISSN: 0001-8708,1090-2082. DOI: 10.1016/j.aim.2021.107767. URL: https://doi.org/10.1016/j.aim.2021.107767.
- [2] F. Cedó, A. Smoktunowicz, and L. Vendramin. "Skew left braces of nilpotent type". In: *Proc. Lond. Math. Soc.* (3) 118.6 (2019), pp. 1367–1392. ISSN: 0024-6115,1460-244X. DOI: 10.1112/plms.12209. URL: https://doi.org/10.1112/plms.12209.
- [3] I. Heckenberger and L. Vendramin. "A classification of Nichols algebras of semisimple Yetter-Drinfeld modules over non-abelian groups". In: *J. Eur. Math. Soc. (JEMS)* 19.2 (2017), pp. 299–356. ISSN: 1435-9855,1435-9863. DOI: 10.4171/JEMS/667. URL: https://doi.org/10.4171/JEMS/667.
- [4] I. Heckenberger and L. Vendramin. "The classification of Nichols algebras over groups with finite root system of rank two". In: *J. Eur. Math. Soc. (JEMS)* 19.7 (2017), pp. 1977–2017. ISSN: 1435-9855,1435-9863. DOI: 10.4171/JEMS/711. URL: https://doi.org/10.4171/JEMS/711.
- [5] V. Lebed and L. Vendramin. "Homology of left non-degenerate set-theoretic solutions to the Yang-Baxter equation". In: *Adv. Math.* 304 (2017), pp. 1219–1261. ISSN: 0001-8708,1090-2082. DOI: 10.1016/j.aim.2016.09.024. URL: https://doi.org/10.1016/j.aim.2016.09.024.

The full list of publications is available on my webpage.

#### Selected talks

1/2023: Skew braces, cabling and indecomposable solutions to the Yang-Baxter equation, Categories, Rings and Modules, a conference in honor of Alberto Facchini, Padova, Italy.

6/2022: Left-ordered groups, Garside groups and structure groups of solutions, Algebra days in Caen, France.

1/2022: Radical rings, braces and the Yang—Baxter equation. Braces in Bracelets Bay. LMS Regional Meeting. Swansea.

- **8/2021**: Radical rings, braces and the Yang—Baxter equation. ECOLE CIMPA: Non-associative algebras and their applications, Madagascar.
- 8/2019: New developments in radical rings. Pure Maths Colloquium, University of St Andrews, UK.
- 7/2019: On the classification of Nichols algebras. MAXIMALS Seminar, University of Edinburgh, UK.
- 6/2019: Skew braces and the Yang-Baxter equation. Groups, rings and associated structures. Spa, Belgium.
- 2/2018: Radical rings, braces and the Yang-Baxter equation. Exeter, UK.
- 4/2017: Set-theoretical solutions of the Yang-Baxter equation. MIT, Massachusetts, USA.
- 4/2017: Nichols algebras. Warsaw University, Poland.

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### **Prizes and fellowships**

- 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).

### **Grants**

- 2021: OZR3762. Vrije Universiteit Brussel, Belgium (100000 EUR).
- 2017: MathAmSud. Chile-France-Argentina (12000 EUR).
- 2016: PICT 2016-2481. Agencia Nacional de Promoción Científica y Tecnológica, Argentina.
- 2014: PICT 2014-1376. Agencia Nacional de Promoción Científica y Tecnológica, Argentina.
- 2013: UBACyT 20020110300037. Universidad de Buenos Aires, Argentina.

## **Conferences organized**

- $\textbf{2024} : \ \, \text{Banff Workshop (24w5201)} : \ \, \text{Skew Braces, Braids and the Yang-Baxter Equation. Organizers} : \ \, I. \\ \, \text{Colazzzo, J. Plavnik, E. Rowell, L. Vendramin. Alberta, Canada. May 5-10}. \\ \, \, \text{Colazzzo, Database} : \ \, \text{Colazzo, Database} : \ \,$
- **2024**: Oberwolfach mini-workshop (2405b): Bridging number theory and Nichols Algebras via deformations. Organizers: G. Carnnovale, I. Heckenberger, L. Vendramin. Germany. February 26 to March 4.
- **2023**: Groups, rings and the Yang–Baxter equation. Organizers: I. Colazzo, A. Van Antwerpen, L. Vendramin. Blankenberge, Belgium. June 19–23.
- **2023**: Oberwolfach mini-workshop (2309a): Skew braces and the Yang–Baxter equation. Organizers: T. Brzezinski, I. Colazzo, A. Doikou, L. Vendramin. Germany. February 26 to March 4.
- **2022**: The algebra of the Yang–Baxter equation. Organizers: I. Colazzo, J. Okninski, L. Vendramin. Stefan Banach International Mathematical Center, Będlewo, Poland. July 10–15.
- **2019**: Oberwolfach mini-workshop (1946a): Algebraic tools for solving the Yang-Baxter equation. Organizers: E. Jespers, V. Lebed, W. Rump, L. Vendramin. Germany. November 10–16.
- **2019**: Workshop on quantum symmetries. Organizers: I. Angiono, A. Solotar, L. Vendramin. ICTP-SAFIR, São Pablo, Brazil. October 16–18.

### **Editorial activity**

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

### **Mentoring**

#### Current Ph.D. students

- o Emiliano Acri (from 2018).
- o Santiago Ramírez (from 2019).
- o Thomas Letourmy (co-supervised with J. Vercruysse, from 2021, FRNS).
- o Senne Trappeniers (co-supervised with Arne Van Antwerpen, FWO, from 2021).
- Silvia Properzi (from 2022).

#### Former Ph.D. students.....

o Charlotte Verwimp (co-supervised with E. Jespers, VUB, 2018—2022).

#### Postdocs

- o Carsten Dietzel (Humboldt, from 2023).
- o Kevin Piterman (FWO, from 2023).
- o Arne Van Antwerpen (FWO, from 2020).
- o Marco Bonatto (Conicet, 2019—2020).