Jonathan Narboni

Post-Doctoral researcher

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Education

2019-2022:	**Ph.D thesis in graph theory**, *LaBRI, Bordeaux University*.
2017-2019:	**Master's degree in computer science (Algorithms and Models)**, *Bordeaux University*.
2009-2013:	**Bachelor's degree in mathematics-computer science**, *Bordeaux University*.
2010-2012:	**Enginering school**, *Télécom SudParis, Evry, Essonne*.
2008-2010:	**Preparatory classes**, *Two-year undergraduate intensive course in mathematics and physics*, Lycée Leconte-de-Lisle, La Réunion.

Research

2022-present	**Post-Doctoral position**, Jagellonian University, Krakow. supervised by Bartosz Walczak
2019-2022:	**Ph.D thesis**, *Homomorphisms, colorings and structural properties of graphs*, Laboratoire Bordelais de Recherche en Informatique (LaBRI), Bordeaux University. advised by Marthe Bonamy, František Kardoš and Éric Sopena
March-July 2019	**Master's Internship** , *Homomorphisms of signed graphs*, Laboratoire Bordelais de Recherche en Informatique (LaBRI), Bordeaux University. advised by František Kardoš

Publications

On the 4-color theorem for signed graphs, *(European Journal of Combinatorics, 2021)*, with F. Kardoš.

A note on deterministic zombies, *(Discrete Applied Mathematics, 2021)*, with V. Bartier, L. Bénéteau, M. Bonamy, H. La.

A note on connected greedy edge-colouring, *(Discrete Applied Mathematics, arXiv)*, with M. Bonamy, C. Groenland, C. Muller, J. Pekarek, A. Wesolek.

On a recolouring version of Hadwiger's conjecture, *(submitted, arXiv)*, with M. Bonamy, M. Heinrich, C. Legrand-Duchesne.

On Vizing's edge colouring question, *(JCTB, arXiv)*, with M. Bonamy, O. Defrain, T. Klimošová and A. Lagoutte.

Circular $(4-\epsilon)$-coloring of some classes of signed graphs, *(submitted, arXiv)*, with F. Kardoš, R. Naserasr and Z. Wang.

Coloring of signed graphs with given cyclomatic number, *(in preparation)*, with J. Bok, N. Jedličková, D.Lajou and E. Sopena.

Lower bound for constant-size local certification, *(submitted, arXiv)*, with V. Ardévol Martinez, M. Caoduro, L. Feuilloley, P. Pournajafi, J.F. Raymond.

Vizing's edge-coloring conjecture holds, *(in preparation)*.

Research Visits

July 2021	**Théo Pierron**, *Université de Lyon.*
Dec. 2019	**Tereza Klimošová**, *Univerzita Karlova, Prague.*

Talks (Conference/Workshop)

Nov. 2021	***Vizing's edge-coloring conjecture holds***, Journée graphes et algorithmes 2021 (online).
May 2021	***On Vizing's edge colouring question***, CanaDAM, minisymposium on reconfiguration (online).
May 2021	***Coloring of signed graphs with given cyclomatic number***, Hosigra annual meeting 2021 (online).
Nov. 2020	***On Vizing's edge colouring question***, Journée graphes et algorithmes 2020 (online).
Nov. 2019	***On the 4-color theorem for signed graphs***, Journées graphes et algorithmes, Bruxelles.
Oct. 2019	***On the 4-color theorem for signed graphs***, Bordeaux Graph Workshop, Bordeaux.

Talks (Seminar)

Dec. 2021	***On a recolouring version of the Hadwiger's conjecture***, Bratislava graph seminar (online).
Sep. 2021	***On Vizing's edge colouring question***, Bordeaux graph seminar (online).
Sep. 2020	***On Vizing's edge colouring question***, Bratislava graph seminar (online).
Dec. 2019	***On the 4-color theorem for signed graphs***, Prague graph seminar.
Sep. 2019	***On the 4-color theorem for signed graphs***, Bordeaux graph seminar.