# PERSONAL BIBLIOGRAPHY

## Peer-reviewed articles

[Pul21] An uncountable Mittag-Leffler condition with an application to ultrametric locally convex vector spaces, 17 Pages.
To appear in **Journal de Théorie des Nombres de Bordeaux (JTNB)**. `PDF`

[Pul17] *Infinitesimal deformation of p-adic differential equations*, 39 pages.
**Mathematische Annalen**, June 2017, Volume 368, Issue 1-2, pp 111-164. `PDF`

[Pul16] *Rank one p-adic differential and q-difference equations over the Amice's ring*, 25 pages.
**Contemporary Mathematics** Vol. 665, (2016); ISBN: 978-1-4704-1988-2 `PDF`

[PP15b] *The convergence Newton polygon of a p-adic differential equation II : Continuity and finiteness on Berkovich curves*, 28 pages. (With J.Poineau.)
**Acta Mathematica**, 214 (2015), no. 2, 357-393 `PDF`

[Pul15] *The convergence Newton polygon of a p-adic differential equation I : Affinoids domain of the Berkovich affine line*, 34 pages.
**Acta Mathematica**, 214 (2015), no. 2, 307-355. `PDF`

[PP15a] *Continuity and finiteness of the radius of convergence of a p-adic differential equation via potential theory*, 20 pages. (With J.Poineau.)
**Crelle's Journal**, Volume 2015, Issue 707, Pages 125-147. `PDF`

[Pul13a] *An algorithm computing non-solvable spectral radii of p-adic differential equations*, 5 pages.
**C.R.A.S.** Vol. 351 - N. 5-6, p.167-171 - Mars 2013 `PDF`

[Pul11] *A basic introduction to deformation and confluence of ultrametric differential and difference equations*.
**Séminaires et Congrès** 23 (2011), 331-366. Comptes rendu de l'ÉCOLE THÉMATIQUE *Théories galoisiennes et arithmétiques des équations différentielles*, 21-25 septembre 2009, CIRM, Luminy. `PDF`

[CP09] *Arithmetic and Differential Swan conductors of rank one representations with finite local monodromy.* (With B.Chiarellotto). 38 pages.
**American Journal of Mathematics**, Vol.131, (2009), 1743-1794. `PDF`

[Pul08] *p-Adic Confluence of q-Difference Equations*.
**Compositio Mathematica**, Vol. 144, p.867-919. `PDF`

[Pul07] *Rank One Solvable p-adic Differential Equations and finite Abelian Characters via Lubin-Tate Groups*.
**Mathematische Annalen**, Vol. 337, p.489-555. `PDF`

[Pul05] *Frobenius structure for rank one p−adic differential equations*.
**Contemporary Mathematics**, Vol. 384, 11 pages. `PDF`

## Preprints

[PP22b] *Banachoid spaces*, 33 pages. (With J.Poineau.) `PDF`

[PP22f] *The convergence Newton polygon of a p-adic differential equation VI : Global Index theorems*, 87 pages. (With J.Poineau.) `PDF`

[PP22e] *The convergence Newton polygon of a p-adic differential equation V : Local Index theorems*, 82 pages. (With J.Poineau.) `PDF`

[PP22d] *The convergence Newton polygon of a p-adic differential equation IV : Controlling graphs*, 50 pages. (With J.Poineau.) `PDF`

[PP22c] *The convergence Newton polygon of a p-adic differential equation III : Global decomposition*, 68 pages. (With J.Poineau.) **PDF**

[Pul22b] *Existence of injective resolutions and acyclicity results for non-archimedean locally convex vector spaces. 30 Pages.* (file available on demand)

[Pul22c] *Radius of convergence of non archimedean power series.* 50 Pages. (file available on demand)

[Pul13b] *Small connections are cyclic*, 10 pages. **PDF**

# Ongoing Projects

[PLPD22] *Exponents for irregular differential modules: a tannakian approach to the theory of exponents.* With Ambrus Pál (Imperial College London, UK), Christopher Lazda (University of Exeter, UK), Marco D'Addezio (IMJ-PRG, Paris, Fr). (see my talk at Padova 2022)

[PC22] *Finiteness of compactly supported de Rham cohomology of non-archimedean differential equations on Berkovich curves, with an application to rigid local systems.* With Richard Crew (University of Florida, USA). (See his talk at Padova 2022)

[PP22a] *Finite monodromy and de Rham index of non-archimedean differential equations.* With Ambrus Pál (Imperial College of London, UK).

[Pul22a] *Index theorem and Riemann-Hurwitz formula for non-archimedean differential equations over Berkovich curves.*

[PA22] *Wild finite étale coverings of p-adic annuli.* With Amina Azzouz (BIMSA, Beijing, China).

# Other writings

2014 *Equations différentielles p-adiques.* **Mémoire d'habilitation à diriger des recherches**, 142 pages, 11 December 2014. **PDF**

2006 *Équations différentielles d'ordre un et applications, Confluence des équations aux q-différences p-adiques.* **Doctoral thesis**, 210 pages, 14 June 2006. **PDF**