

Benjamin LLEDOS  
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## WORKING EXPERIENCE

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### **IMT, Toulouse, France**

*September 2020 – August 2023*

PhD thesis under the supervision of Pierre Bousquet.

Subject : "Propriétés qualitatives de solutions de problèmes dégénérés et singuliers en Calcul des Variations"

### **UC Louvain, Louvain-la-Neuve, Belgium**

*September 2023 –Current*

Post-doc under the supervision of Heiner Olbermann: "Variational problems for curved surfaces".

Subject: Gamma convergence, currents

## PUBLICATIONS

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**A uniqueness result for a translation invariant problem in the Calculus of Variations 2022,**  
*accepted by the Journal of Convex Analysis.*

**A uniqueness result for a non-strictly convex problem in the Calculus of Variations 2023, accepted**  
*by ESAIM: COCV.*

**A uniqueness result for a two-dimensional variational problem 2022, submitted.**

**Regularity of the stress field for degenerate and/or singular elliptic problems 2023, submitted.**

## EDUCATION AND DEGREES

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### **Université Paul Sabatier, Toulouse, France**

*September 2019 - June 2020*

Second year of master's in Research & Innovation, graduated with high Honors.

### **Université Paul Sabatier, Toulouse, France**

*September 2018 - June 2019*

Preparation for the French Agregation (highest French teaching degree). Major:  
Scientific Calculus. Rank: 76

### **Université Paul Sabatier, Toulouse, France**

*September 2017 - June 2018*

First year of Master's in "Enseignement supérieur et recherche", graduated with Honors.

### **Université Paul Sabatier, Toulouse, France**

*September 2014 -June 2017*

Three years of Bachelor's degree, graduated with Honors.

## TALKS AND CONFERENCES

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<b>Université de Toulouse III, Toulouse, France</b> <i>Presentation at the Phd-PDE seminar</i>	February 2021
<b>CIRM, Marseille, France</b> <b>Virtual research school, Shape Optimization, Spectral Geometry and Calculus of Variations. Presentation of open questions.</b>	29 March- 2 April 2021
<b>Université de Lorraine, Nancy, France</b> <i>Rencontre en Calcul des Variations à Nancy</i> <i>Presentation of the article "A uniqueness result for a translation invariant problem in the Calculus of Variations ".</i>	8-10 December 2021
<b>Université de Toulouse III, Toulouse, France</b> <i>Presentation at the Analysis seminar</i>	19 September 2022
<b>University of Warsaw, Poland</b> <i>Presentation at the Seminar of mathematical physics equations group.</i>	25 May 2023
<b>Université de Toulouse III, Toulouse, France</b> <i>Presentation at the Phd-PDE seminar</i>	6 July 2023
<b>Université catholique de Louvain-la-Neuve, Louvain-la-Neuve, Belgium</b> <i>Presentation at the Analysis-PDE seminar</i>	17 October 2023

## RELEVANT EXPERIENCE

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<b>INSTITUT MATHEMATIQUES DE TOULOUSE, Toulouse, France</b> Internship under the supervision of Prof. Pierre Bousquet Introduction to the Calculus of Variations.	March- June 2020
<b>INSTITUT MATHEMATIQUES DE TOULOUSE, Toulouse, France</b> Internship on the Beltrami equation supervised by Prof. Jean-Pierre Otal.	February - June 2018
<b>INSTITUT MATHEMATIQUES DE TOULOUSE, Toulouse, France</b> Internship on ODE's under the supervision of Prof. Grégory Faye.	February - June 2017

## TEACHING

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**Université Paul Sabatier, Toulouse, France**  
60h of tutorials, mathematics, first year of Bsc.

*September 2020- June 2021*

**Université Paul Sabatier, Toulouse, France**  
66h of tutorials, mathematics, first year of Bsc.

*September 2021 - June 2022*

**Université Paul Sabatier Toulouse, France**  
58h of tutorials, mathematics, first year of Bsc and 8h of practical works (Python), first year of Bsc.

*September 2022 - June 2023*

**Université Paul Sabatier, Toulouse, France**  
4h of oral exam, mathematics, third year of Bsc.

*2018-2021*