

CV pour candidature au comité national du CNRS section 6, collège A2

Name : Arnaud Musso
Date of Birth : 4th August 1976, French
Marital Status: married, 2 children

University : University of Lille
Laboratory : Phlam, UMR 8523
Status : Full Professor, Exceptional class



Education

2011	Habilitation à Diriger des Recherches « De l'instabilité modulationnelle à la génération de supercontinuum spectraux : une contribution », Supervisor : Marc Douay	Lille, France
2001-2004	PhD thesis in optical engineering "Amplificateurs paramétriques à fibre pour des applications en télécommunications à haut débit", Supervisor : Hervé Maillotte	FEMTO-ST, France
2000-2001	Master degree in Optics, Mechanics and Microsystems	FEMTO-ST France

Professional

2020-2021	6 months appointment as CNRS researcher	Lille, France
2019-2020	6 months appointment as CNRS researcher	Lille, France
2014	Full Professor, 30^{ème} section – University of Lille	Lille, France
2013-2014	6 months appointment as CNRS researcher	Lille, France
2013	Invited professor at the University of Burgundy for 1 month	Dijon, France
2011-2012	6 months appointment as CNRS researcher	Lille, France
2005-	Assistant Professor, 30^{ème} section – University of Lille	Lille France
2004-2005	Post-Doctoral position in the French atomic agency (CEA)	Bordeaux, France

Reputation

→ Awards

2024-2029	Nomination at the <i>Institut Universitaire de France Senior Member</i>	
2023	OPTICA Fellow	
2015-20	Nomination at the <i>Institut Universitaire de France, Junior Member</i>	
2013	Outstanding Reviewer of the Optical Society of America (OSA)	
2010-2024	Competitive Bonus Award for Research Supervision, French Ministry of Education	

→ Highlights

- **3 items of work highlighted in Nature Photonics**
- Invited to write a short editorial in *Nature Photonics (News & Views)*, in 2012
- Invited to give lectures in **3 foreign countries** (Spain, Belgium, Italy)

→ Expertise

- **Topical Editor**, Optics Letters (OSA) since May 2014 (2 terms, 2014-2017, 2017-2020). 
- Member of the scientific committee of OSA **Nonlinear Photonics** (2012, 2014, 2016), **ICNP/AOM** 2013, of **OPAL** (2018, 2019, 2020), of **Nonlinear Optics conference / SPIE Photonics Europe** (2020, 2022, 2024), of Optica **Advanced Photonics** congress (SOF, 2022, 2024), **EOSAM** (2023).
- Chairman of conferences **ICNP/AOM**, 2013, **ACP** 2015, **FIO** 2015, **CLEO** 2017, 2023
- Independent Expert for the *Laser MegaJoule project* (French Atomic Agency)
- Expert for the **French, Swedish, Belgium, Polish** Research Councils, the **New Zeland** James Cook fellowship, ARC, the **China** future research frontier, the **German** DFG....

- Reviewer for journals (*Nature, Nature Photonics, Physical Review Letters, Optics Letters,...*)
- **Reviewer of 73 PhD Thesis/HDR (7 HDR, 11 as president and 13 in foreign countries).**
- Member of the selection committee of the **Institut universitaire de France** (2021, 2022,2023,25)
- Scientific expert committee for a big French national funding on 5G (**PEPR 5G, 64 M€**).
- Scientific expert for the **HCERES** (3 labs)

Service activities

→ Scientific

2021-2025 Creation & Direction of an **International Research Project** (IRP Lille Aston- Ferrara- international project on advanced nonlinear effects in optical fibers) supported by the CNRS between the University of ASTON, FERRA & my group at the University of Lille (12 people, 75 k€).

2021-2025 **Creation & head of the international laboratory HOLISTIC** (University of Lille-Hong Kong, 12 people, founder : ULille)



2020-2025 **Creation and Head of the Groupement de recherche ELIOS** (French Network on nonlinear fiber optics, 300 members, founder : CNRS)



2017-2019 **Head of the Photonics department** of the PHLAM laboratory (47 people)

2015-2019 **Creation & head of the SYLFE Laboratory** involving the CEA CESTA & the University of Lille (12 people)



→ **Research projects as Principal Investigator and Grant Holder (2,1 M€ + 1.5 M€)**

→ **Teaching, responsible for forming modules of :**

2015-2019 Laboratory work in **Master's degree in physics** (45 students+ 6 teachers)

2013-2020 Optical telecommunications in engineer School (*TelecomLille, 120 students+3 teachers*)

2010-2013 Advanced signal processing optional module in **Master's research degree** (2 teachers)

2008-2015 Signal processing module in **Master's degree in physics** (50 students+4 teachers)

2007-2019 Optical telecommunications in engineer School (*TelecomLille, 100 students+3 teachers*)

→ **Administrative:**

2022- 2025 Co-animator of one of the **4 hubs of the initiative d'excellence** in ULille (chargé de mission)

2019- 2023 **President (Elected)** of the national **committee of French universities (CNU)**, section 30.

2015- 2019 *Elected* to the CNU, section 30.

2012-2014 *Elected* to the scientific council member of the University of Lille

2012- 2014 Valorization manager of the PHLAM laboratory

Students supervision

→ **Advisor of the Lille OSA student chapter** since 2016



→ **Supervisor of 13 PhD thesis (1 ongoing)**

→ **Supervisor of 9 post docs**

Publications

165 papers in refereed journals including *5 reviews, 1 Nature photonics, 1 Nature Review Physics, 3 Nature communications, 8 Phys. Rev. Lett./X.*

6 Chapters in Books

Citations: 7089; **H-Index:** 45 (Google Scholar)

74 Invited Talks at international conferences

2 Post-Deadline Papers at international conferences

>200 Papers at international conferences (90% acceptance as oral presentation)

10 patents or patent applications