### Curriculum Vitæ

### Suzy S. MADDAH

10 Rue de la Mauvendière
87000 Limoges
France
suzy.maddah@etu.unilim.fr
+33 (0)6 81 16 90 37

# Personal Information

Birth date	08.03.1988
Citizenship	Lebanese
Gender	Female

## Education

Jan 2012 – Sep 2015	<b>Ph.D.</b> in Mathematics and applied mathematics Defense expected within the third week of september 2015	
	<ul> <li>Topics:</li> <li>Completely integrable Pfaffian systems</li> <li>Singularly-perturbed differential systems</li> </ul>	
	<ul> <li>Affiliations:         <ul> <li>University of Limoges</li> <li>XLIM Research Institute, DMI</li> <li>Computer Algebra Team</li> <li>Ecole Doctorale des Sciences et Technologies</li> <li>Lebanese University, Beirut, Lebanon</li> </ul> </li> </ul>	
	• Advisor: Prof. Moulay A. Barkatou (XLIM) Co-Advisor: Dr. Hassan Abbas (Lebanese University)	
Sep 2008 – Jul 2010	Master of Research in Mathematics Partial differential equations and numerical analysis Ecole Doctorale des Sciences et de Technologie Lebanese University, Beirut, Lebanon	
Sep 2005 – Jul 2008	<b>Bachelor</b> of Pure Mathematics Faculty of Sciences Lebanese University, Beirut, Lebanon	

### Publications

Published	Proceedings of international conferences (with reviewing process):
papers	• M.A. Barkatou, S.S. Maddah (2015). Removing Apparent Singularities of Systems of Linear Differential Equations with Rational Function Coefficients. To appear in <i>Proceedings of the 40th International Symposium on Symbolic and Algebraic Computation</i> , ACM Press.
	• H. Abbas, M.A. Barkatou, S.S. Maddah (2014). On the Reduction of Singularly- Perturbed Linear Differential Systems. In <i>Proceedings of the 39th International</i> Symposium on Symbolic and Algebraic Computation, ACM Press, pp. 320-327.
	• H. Abbas, M.A. Barkatou, S.S. Maddah (2014). Formal Solutions of a Class of Pfaffian Systems in Two Variables. In <i>Proceedings of the 39th International Symposium on Symbolic and Algebraic Computation</i> , ACM Press, pp. 312-319.
Submitted papers	• M.A. Barkatou, S.S. Maddah (2015). Formal Solutions of Singularly-Perturbed Linear Differential Systems (50 pages). Submitted to Journal of Advances in Applied Mathematics, Elsevier.
In progress	• M.A. Barkatou, M. Jaroschek, S.S. Maddah (2015). Formal Solutions of a Class of Pfaffian Systems in Several Variables (25 pages).
Software	T
Maple	
	• AppSing: Package for removing apparent singularities of systems of linear dif- ferential equations with rational function coefficients.
	• ParamInt: Package for symbolic resolution of singularly-perturbed linear systems of differential equations, prototype implementation.
	• PfaffInt: Package for symbolic resolution of completely integrable pfaffian systems with normal crossings, prototype implementation.
Mathemagix	
-	• Lindalg: Package for symbolic resolution of linear systems of differential equations with singularities. Developed within Google Summer of Code 2014.

#### Talks

Conferences	
	$\bullet~11\text{-}12/12/2014$ : Integrability days, XLIM, Limoges University, France
	• 25/10/2014: Doctoral students workshop, "A Peek into a Black Hole", XLIM, University of limoges, France
	• 23-25/07/2014: The 39th International Symposium on Symbolic and Algebraic Computation (ISSAC) , Kobe, Japan
	• 9-12,07,2014: The 20th International Conference on Applications of Computer Algebra (ACA), New York, U.S.A.
	• 1-2/04/2014: Functional Equations in Limoges (FELIM), XLIM, Limoges, France
	• 26-27/05/2014: Structured Matrix Days (SMD), XLIM, Limoges, France
	• 4-8/11/2014: Joint Presentation at the 7th Week of Math-Enterprises, Limoges, France
	• 2-6/07/2013: The 19th International Conference on Applications of Computer Algebra (ACA), Malaga, Spain
	• 13-17/05/2013: Journées Nationales de Calcul Formel (JNCF), CIRM, Luminy, France
Seminars	
	• 14/07/2014: Kolchin Seminar, Graduate Center, City University of New York, U.S.A.
	• 12/05/2014: SpecFun Seminar, INRIA Saclay Ile-de-France
	• 17/06/2014: Functional Equations Seminar, IRMA, University of Strasbourg, France
	• 11/04/2013: Computer Algebra Seminar, DMI- XLIM, University of Limoges
	• 14/12/2012: Mathematics Seminar, Laboratory of Mathematics, Beirut, Lebanese University
Posters	
1 021612	$\bullet~06/06/2013$ : Doctoral students forum, Lebanese University, Beirut, Lebanon

#### Conference co-organisation

23-25/03/2015: Functional Equational in LIMoges (FELIM), XLIM, Limoges, France

#### Teaching

Dec 2014 – Aug 2015	<b>Teaching and Research Assistant (ATER)</b> Department of Mathematics and Computer Scie University of Limoges Teaching language: French	ence
	Course	Semester
		M / ACCVON

Course	Semester	TD	TP
Asymptotic analysis and perturbation methods	Master ACSYON	10 h	
Computer algebra	M1 Math.	9 h	12 h
Artificial intelligence	M1 Comp. Sci.	9 h	
Object-oriented analysis and design	S6		30 h
Computer architecture	S4/S6	25.5  h	$1.5 \ h$
Logic programming with Prolog	S4		18 h
Info 2	S2	27 h	15 h
Info advanced	S2	7.5 h	12 h

Sep 2010 –	Lecturer/ Teaching Assistant
Dec 2012	Beirut Arab University, Beirut, Lebanon
	Faculty of Engineering
	Physics and Mathematics Department
	Teaching language: English
	Courses at undergraduate level, $\approx 200$ h TD and 50

Courses at undergraduate level,  $\approx$  200h TD and 50h lecture: Linear algebra, calculus, differential equations, vector analysis, complex analysis, Matlab and numerical analysis.

#### Qualifications

T

Programm- ing Experi- ence	C, C++, Java, Mathemagix, Matlab, Maple
Languages	English (Fluent in reading, writing, and speaking) French (Good) Arabic (Native language)

#### Activities

June 2011	Course on Social media
	Offered by SMEX, Lebanon
Mar - June 2010	Training at the Academy for Civic Activism; USAID's Office of Transition Initiatives (OTI); Theme: Creation of nongovernmental organizations; Workshops on conflict resolution, project design, writing proposals, funding resources, human resources management, advocacy; Beirut, Lebanon
5-16 July 2010	Human rights Workshop; Organised by COSV(Italy), PPM and KAFA (Lebanon); Funded by the European Union; Focus on access to scientific knowledge in developing countries; Beirut, Lebanon
Jul - Aug 2010	Activities with Lebanese Society for History of Science
2006 - 2010	Co-organising the Science and Philosophy Café with Zico House (Lebanon) and local clubs at the lebanese university

#### References

- **Prof. Moulay A. Barkatou** University of Limoges ; CNRS Tel: +33 (5) 55-45-73-83 Fax: +33 (5) 55-45-73-22 Email: moulay.barkatou@unilim.fr

- Dr. Hassane Abbas Lebanese University, Faculty of Sciences I, Beirut- Lebanon Phone: +961 (0)3 147704 Email: habbas@ul.edu.lb

- Further references are available upon request.