

# SAHBI AYARI, PhD

## Education

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**Ph.D. in Mathematics**, University of Montreal, Canada, 1993-1997

Title of dissertation: "Subdivision Schemes for curve Generation".

**M.Sc. in Applied Mathematics**, University of Montreal, Canada, 1990-1993.

Thesis: "TVD Scheme for the Numerical Resolution for Hyperbolic Systems- Application to fluid dynamics".

**D.U.E.S. in Mathematics/Physics**, University of Tunis, Tunisia, 1988.

## Professional Experience

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- Lecturer of Mathematics, Sep 2005-Present, Foundation Program, Dept. of Math & Computer, Qatar University.
- Lecturer of Mathematics, Aug. 1999 – June 2005, U.G.R.U., Math Unit, UAE University.
- Lecturer of Mathematics, Jun. 1999 – Aug. 1999, Dept. of Math & Statistics, Brebeuf College, Quebec, Canada.
- Lecturer of Mathematics, 1998-1999, Department of Mathematics and Statistics, University of Montreal, Quebec, Canada
- Teaching Assistant, 1990-1997, Department of Mathematics and Statistics, University of Montreal, Quebec, Canada

## Professional Development

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- **Mini exam Coordinator (Blackboard Based)**, Foundation Program, Qatar University, Oct. 2008 – Jan.2012.  
Role: Designing, Preparing, and pools of questions, design the online random block tests and supervising the online mini exam for level 1& 2 Math for sciences tracks.
- **Task force committee for rewriting the new MATHF course syllabi** (Member) May 2012. Role: writing a new syllabus for the proposed two new courses (Elementary Algebra & Pre-Calculus).
- **LMS Math1 and Math2 Online HW Project**, (Team Leader and Consultant)): Mar. 2010 – Jan. 2012. Role: Help and support the team in the use of the software Respondus and design a bank of questions.
- **QU Strategic Planning**: FP Representative since September 2012
- **FP Assessment committee**: Member since September 2012
- **SLOAS (Student Learning Outcomes Assessment) Committee (Chairman)**, Foundation Program, Qatar University.2007- 2009
- **Foundation Program Newsletter** (Co-editor), Qatar University. 2005-2011
- **Math Placement Test committee** member, Foundation Program, MATF. 2005 – 2006
- **Math Testing Administration Committee** member, UGRU, Math Unit, UAE Univ., 2003 to 2005.
- **Students with Special Needs Committee**, (Member), UGRU, Math Unit, UAE Univ., 2004 to 2005.
- **Pre-calculus Course Coordinator**. UGRU, Math Unit. UAE university, 2001 to 2003.

- **Math Curriculum Committee** (Member), UGRU, Math Unit, UAE university, 1999-2000.
- **Event Coordinator and Judge, Examining Committee**, Olympiade de Mathematiques de Quebec, University of Montreal, Canada, 1992-93-94
- UNIX Support Assistant, Faculty of Engineering, Summer 1994, and 1995. Univ. of Manitoba. Canada.
- **Computer Presentation of Analytical Functions using Mathematica**, (Trainer) Univ. de Montreal, 1994.
- Math/Computer Club, ( Founding Member), UAE University, May 2000.
- **Computer Presentations of surfaces with Maple**, (Trainer) 1994. University of Montreal.

## Publications

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- **Sahbi Ayari**, Mohamed Ali Ayari, Arslan Ayari, (2012), " Whole-Part (WP): A New Model of Teaching Thinking Skills for Math Students. "*Journal of Teaching and Education*", ISSN: 2165-6266 :: 1(2):441–446 (2012) Copyright 2012 by UniversityPublications.net. <http://www.universitypublications.net/jte/0102/html/PRG355.xml>
- Mohamed Ali Ayari, **Sahbi Ayari**, Arslan Ayari, (2012)," Effect of Use of Technology on Students' Motivation. "Journal of Teaching and Education", ISSN: 2165-6266 :: 1(2):407–412 (2012) Copyright 2012 by University Publications. Net <http://www.universitypublications.net/jte/0102/html/PRG225.xml>
- **Sahbi Ayari**, F. David Minbashian, M. Ali Ayari, (2012), "Compare Contrast (CC): A Technique of Teaching Thinking Skills to Math Students", 5<sup>th</sup> Conference on e-Learning Excellence in The Middle East, Sustainable Innovation in Education [capacity, building, blended learning and beyond], page **349-256**, 30 January - 2 February 2012, Dubai, UAE.
- **Sahbi Ayari**, Arslan Ayari, M. Ali Ayari, (2010), ``Combining Instructional Technologies For High Grade Math And Computer Online Assessment" Published in EDULEARN10 -The International Conference on Education and New Learning Technologies, page **6157-6163**, 5-7 July, 2010. ISBN: 978-84-613-9386-2 Barcelona, Spain. <http://library.iated.org/view/AYARI2010COM>
- **Sahbi Ayari**, M. Ali Ayari (2009), "Piloting Web Based Exams with a Large Number of Students". Authors: Sahbi Ayari, M. Ali Ayari Published in the proceedings: Asian Conference on Education 2009, ACE2009, page 1020-1030, Oct.24-25, Osaka, Japan
- M. Ali Ayari, Arslan Ayari, **Sahbi Ayari**. (2005), "Coding and decoding messages with Maple," Proceedings of The First Annual Conference for Middle East Teachers of Science, Mathematics and Computing Middle East Teachers of Science, Mathematics and Computing: Abu Dhabi, Edited by S. M. Stewart and J. E. Olearski, Abu-Dhabi, United Arab Emirates, **pp. 74-81**, (2005)
- M. Ali Ayari, M. Iadh Ayari and **Sahbi Ayari**, "Computation of the Coefficients of Ricatti Matrix equations for Integrable PDEs". *Far East Jour.App. Math.* 2005. Math **18**, 85-103 2005
- **Sahbi Ayari** and M. Iadh Ayari, "An explicit Separate solution for the Tzitzeica equation," Mathematical Physics Electronic Journal **9**,( 2003).
- **S. Ayari** and Serge Dubuc, "La formule de Cauchy pour la longueur d'une courbe," Canad. Math. Bull. 40 (1997), N. **1**, 3-9.

- **Sahbi Ayari** and S. Dubuc, "Schemas continus de subdivision," *In J. Levy Vehel, E. Lutton and C. Tricot (Eds) Fractals in Engineering. From Theory to industrial applications*, Springer Verlag, London (1997) 93-104.
- **Sahbi Ayari** and S. Dubuc, "Functional equations through subdivision algorithms," *Grazer Math. Berlin*, No. **339** (1999) Iteration theory (ECIT 96). Proc. Europ. Conf. On Iteration Theory. L. Gardini, et al. (Eds).
- **Sahbi Ayari** and S. Dubuc, "Recursive Programs for Subdivision Schemes," CRM Preprint. **2513** (1997) Centre de recherches mathématiques

## Community Service, Contributions and Presentations

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- **Speaker:** Designing Online Tests, eLearning PD Week, November 2012, QU
- **Speaker:** Whole-Part: A New Model of Teaching Thinking Skills for Math students, Euro-American Conference for Academic Disciplines & Creativity", June 2012, Prague.
- **Contributed:** Motivating Students: Is there a magical formula?, 3<sup>rd</sup> OFID days, 13-15 February 2012, Qatar University.
- **Speaker :** "Compare Contrast (CC): A Technique of Teaching Thinking Skills to Math Students", 5th Conference on e-Learning Excellence in The Middle East, sustainable innovation in education, Jan. 2012, Dubai, UAE.
- **Speaker:** PD Days: Using Respondus to create question pools, surveys, and tests in Blackboard. Math & Computer Dept., Foundation Program, Qatar University, June 2010.
- **Speaker:** Combining Instructional technologies for high grade math and computer online assessment. Math & Computer Dept., Foundation Program, Qatar University, July 2010.
- **Head of session:** 2nd OFID Days Event 2011. Improving Student Learning through Research. Qatar Univ. Jan. 2011
- **Head of session:** EDULEARN10, Session: Educational Software & Serious Games in Mathematics & Statistics Education. July 2010, Barcelona, Spain
- **Speaker:** RESPONDUS: A tool to create and manage online exams. Math & Computer Dept., Foundation Program, Qatar University, May 2010.
- **Trainer:** Preparation Course for ACT (American College Test), Qatar University.
- **Trainer:** Blackboard(1,2, Follow up session), OFID, Qatar University. 2008 and 2009
- **Speaker:** Piloting Web Based Exams with a Large Number of Students, Asian Conference on Education 2009, ACE2009, Oct.24-25, Osaka, Japan
- **Speaker:** Designing & Developing Pool Based Tests on Blackboard. Math and Computer Dept. foundation Program. Qatar Univ. Oct. 2008
- **Speaker:** Designing & Developing Regular and Pool Based Tests on Blackboard. Math and Computer Dept. foundation Program. Qatar Univ. Mar.2008
- **Speaker:** Building on line course Material and Preparing Math Placement Test using AcroTeX, May 22<sup>nd</sup>, 2006. Math & computer dept. Foundation Program, Qatar University.
- **Speaker:** Using TeX for your own in-class Math Quizzes, Department of Math and Computer, UGRU,UAE Univ. Fall 2004.
- **Contributed:** In house workshops and seminars, Math & Computer Dept., Foundation Program, Qatar University, 2005-2009
- **Trainer:** Teaching techniques & skills to Primary school teachers, Shaqab Independent Primary School for Girls, 2008
- **Attended:** "Symposium Innovation in Education Technology, Empowerment, and Education", Doha, April 30 – May 2, 2006
- **Attended:** BbWorld Europe: Educate, Innovate, Everywhere, Nice - France, 26-28 February 2007

- **Attended:** "International Conference of Mathematical Sciences: Education Sessions," Dec. 2004, Math Dept. UAE University
- **Attended:** "Blackboard 6 Course management Workshop with training for class management and e-learning support ," U.G.R.U, Math Department, UAE University, fall 2003
- **Attended:** "workshop on Computer Generated Exams (CGE)," U.G.R.U, Math Department, UAE University, fall 2002
- **Participant:** "Advanced Website design," Workshop, U.G.R.U, Math Department, UAE University, fall 2000.
- **Participant:** Workshop on the use of ``Frontpage," UGRU, UAE University, Fall 2000.
- **Speaker:** The 46th Quebec Mathematical Sciences Congress and the 20th Atlantic Mathematics and Statistics 18-20 October 1996, Moncton, New-Brunswick, Canada,

## Computer Skills

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- Programming Languages: Derive, Matlab, Maple, Mathematica, Pascal, Fortran and PostScript.
- Utilities: , TeX, LaTeX, Acrotex, Microsoft Office( Word, Excel, PowerPoint)

## Professional Membership

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- Member of the Academic e-Newsletter "Wolfram Insider for Education".
- Member of the Academic e-Newsletter "Echo360".
- Member of the Academic e-Newsletter "Respondus Update Newsletter".
- Member of QUTEX (Qatar University Latex Group) since 2006.

## Volunteer

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- Member of the committee of Students Special Need, Qatar University, 2008 – Present.
- Volunteer in the Asian Games held in Doha, December 2006.

## Awards

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- Runner-Up: **Qatar University Excellence in Teaching Award for Exemplary Online** Course using Blackboard for the Academic year 2009-2010.
- **Fellowship of Ph.D. Thesis Production**, (FICUM), University of Montreal 1998
- Graduate Fellowship, Fac. Arts. Sciences, University of Montreal, 1994-96
- Award for Tuition Exemption. University of Montreal. 1993-1994
- Tuition Exemption, Scientific Mission of Tunisia, W. DC., U.SA, 1990-92