

Abdellatif SAADALDIN

 **Home** : Tel street , Nablus, Autonomous Palestinian Territories

 **Email**: abdel.latif@outlook.com  **Phone**: (+970) 597401477  **WhatsApp Messenger**: (+33) 766190982

 **Skype**: abdel.latif@outlook.com

Gender: Male **Date of birth**: 09/02/1988 **Nationality**: Palestinian

RESEARCH INTEREST

Field of Interest

Numerical modelling and simulations, Synchrotron X-ray, 3D Microtomography Imaging, Image processing, Semiconductor devices, Solar cells, X-ray beam induced current (XBIC), Porous media, Volume averaging, Multi-scale imaging and modelling , Grid coarsening, Local mesh refinement, Machine learning.

EDUCATION AND TRAINING

[01/09/2018 – 29/08/2022] **PhD in Physico-Chimie de la Matière Condensée (Applied Mathematics)**
Institut de Chimie de la Matière Condensée de Bordeaux (ICMCB), University of Bordeaux

Address: 87 Avenue du Dr Albert Schweitze, 33600 , Pessac, France | **Field(s) of study**: Natural sciences, mathematics and statistics: • *Mathematics* | **Thesis**: Two examples of multi-scale numerical modelling combined with advanced X-ray based experiments: multi-scale imaging for reactive transport in porous media and X-ray beam induced current (XBIC)

During my PhD studies, I gained a solid background in all aspects of 3D imaging from data acquisition, over reconstruction and segmentation to physical modelling.

Supervised by: Dr. Dominique BERNARD

[08/08/2010 – 31/12/2013] **Master in Computational Mathematics**

An -Najah National University

City: Nablus |

Thesis Title :Analytical and Numerical Solutions of Magnetohydrodynamic Flow Problems

Supervised by Prof.Dr. Naji Qatanani.

GPA: 3.28 out of 4

[26/08/2006 – 25/05/2010] **Bachelor of Science in Mathematics**

An -Najah National University

City: Nablus |

GPA: 81.9 out of 100

[01/09/2005 – 13/07/2006] **Higher School Certificate (HSC)**

The Ministry of Education and Higher Education

City: Nablus |

GPA: 93.1 out of 100

WORK EXPERIENCE

[01/04/2024 – Current] **Part time Assistant Professor**

An-Najah National University

City: Nablus | **Country**: Palestinian

[15/03/2014 – 01/07/2018] **Researcher, Voluntary base**

An-Najah National University mathematics research group

City: Nablus | **Country:** Palestinian

[26/08/2017 – Current] **Teacher**

Hamdi Alakker Basic School for boys

City: Nablus

Teaching mathematics for Middle school students (three years before University)

[07/02/2011 – 25/08/2017] **Teacher**

Al Makhfia basic school for boys

City: Nablus

Teaching mathematics for Middle school students (three years before University)

[01/09/2010 – 06/02/2011] **Teacher**

Basic Islamic school for boys

City: Nablus

Teaching mathematics for Middle school students (three years before University)

DIGITAL SKILLS

My Digital Skills

Microsoft Office | Latex | Python | Matlab | Jupyter Notebook | Dragonfly | Tomopy

EXTERNAL RESEARCH STAY

External Research stay

- Getting familiar with state-of-the art local X-ray tomography at different scales (micro to nano). Tomcat beamline, Swiss Light Source at Paul Scherrer Institut (SLS at PSI), 28/04/2019 to 18/05/2019.
- Training on correction and improvement for Synchrotron 3D Images. Bundesanstalt für Materialforschung und -prüfung (BAM)/ Berlin, 10/08/2020 to 21/08/2020.

SESAME RELATED EVENTS

SESAME related events

- BEATS X-ray tomography lectures and training course at SESAME, SESAME premises (Allan) Jordan, 6th and 7th of June, 2023.
- The 18th SESAME Users Meeting, SESAME premises (Allan) Jordan, the 4th and 5th of May, 2023.

[02/06/2024 – 05/06/2024] **Beamtime at BEATS beamline**

“Characterization of concrete samples with different compressive strength using synchrotron X-ray microtomography ” (Proposal # 20235017)

CONFERENCES AND SEMINARS

Conferences

- International Conference on Tomography of Materials and Structures (ICTMS-1-5 July 2024), Abdellatif SAADALDIN, Isam Jardaneh, Samir Halaweh, Gianluca Iori, Dominique BERNARD, Characterization of concrete samples with different compressive strength using synchrotron X-ray microtomography.
- The Seventh Palestinian Conference on Modern Trends in Mathematics and Physics (30 July 2022 - 1 August 2022), Abdellatif Saadaldin, Azat M. Slyamov, Michael E. Stuckelberger, Dominique Bernard, Jens W. Andreasen, Multi-Modal

Characterization of Kesterite Thin-Film Solar Cells: Experimental results and numerical interpretation.

- InterPore2021 Online Conference (31 May - 4 June 2021), A. Saadaldin , D. Bernard, Multi-scale imaging and modelling for reactive diffusion at the pore scale.
- Workshop on computational methods in science and engineering, An-Najah National University, Nablus, 14 March, 2015.
- "The Fourth Palestinian Conference on Modern Trend in Mathematics and Physics" , Al-Quds University, Abu Dis Campus, Jerusalem, from 11 to 13 August, 2014.
- Research day in theoretical and applied physics, An-Najah National University, Nablus, 23 November, 2013.

WORKSHOPS AND SUMMER SCHOOLS

Workshops and Summer Schools

- 3D/4D Imaging and Numerical Modelling of Advanced Material Processing, Online (Bordeaux, France, 8-10/03/2021) (Part of the organization commute).
- MUMMERING workshop on the analysis of large 3D/4D datasets, Online (8-10/09/2020).
- How to build and run your own business (Bucharest, Romania, 19-20/02/2020).
- Winter school: multimodal x-ray identification techniques for security applications (Bucharest, Romania, 17-19/02/2020).
- MUMMERING Workshop on Dynamic Imaging (Leiden, Netherland, 10-12/09/2019).
- EMAT Workshop on Transmission Electron Microscopy 2019 (Antwerp, Belgium, 11 - 14/06/2019).
- ITN MUMMERING Workshop on 4D Correlative microscopy and spectroscopy, (Bordeaux, France, 4-5/04/2019).
- Advanced Tomographic Reconstruction using ASTRA and ODL (Amsterdam, Netherlands, 11-13/02/2019).
- 4th International PhD Summer School CINEMAXIV (Fuglsang Manor, Lolland, Denmark, 27-31/08/ 2018).
- CIMPA Summer School in "Random Structures, Analytic and problematic Approaches ", An-Najah National University, Nablus, from 18 to 27 August, 2014.
- CIMPA summer School in " Differential Geometry and Numerical Analysis", Birzeit University, 30 June - 4 July, 2013.

PUBLICATIONS

Publications

- [1] **Sa'ad Aldin A.** and Qatanani N., Analytical and Numerical Methods for Solving Magnetohydrodynamic Flow Problem, International J. of Math. Sci. & Eng. Appl. (IJMSEA), Vol. 8, No. II, p. 313-329, March, (2014).
- [2] **Sa'ad Aldin A.** and Qatanani N., Analytical and Numerical Methods for Solving unsteady MHD flow Problem, International J. of Math. Sci. & Eng. Appl. (IJMSEA), Vol. 9, No. II, pp. 307-318, June, (2015).
- [3] **Sa'ad Aldin A.** and Qatanani N., Analytical and Numerical Methods for Solving Unsteady MHD Flow Through Porous Medium Between Two Parallel Flat Plates, An - Najah Univ. J. Res.(N. Sc.) Vol. 30, p. 173-186, March, (2016).
- [4] **Sa'ad Aldin A.** and Qatanani N., Finite Element Method for Solving Unsteady MHD Flow Through Porous Medium Between Two Parallel Flat Plates, Journal of Applied Mathematics, vol. 2017, Article ID 6856470, 6 pages, 2017.
- [5] J. Hertrich, L. Nguyen, J-F. Aujol, D. Bernard, Y. Berthoumieu, **A. Saadaldin** and G. Steidl, PCA Reduced Gaussian Mixture Models with Applications in Superresolution, Inverse Problems in Imaging, 2021.
- [6] **Abdellatif Saadaldin**, Azat M. Slyamov, Michael E. Stuckelberger, Peter S. Jrgensen, Christian Rein, Mariana Mar Lucas, Tiago Ramos, Angel Rodriguez-

Fernandez, Dominique Bernard, and Jens W. Andreasen, Multi-Modal Characterization of Kesterite Thin-Film Solar Cells: Experimental results and numerical interpretation, Faraday Discussions, 2022, issn: 1359-6640. doi: 10.1039/D2FD00044J

GRANTS & FELLOWSHIPS

Grants & Fellowships

- Marie Skłodowska-Curie fellowship for PhD degree funded by the European Union Horizon 2020 Research and Innovation Network ITN program. Grant Agreement No 765604.

ORGANISATIONAL SKILLS

Organisational skills

Excellent organisational and prioritisation skills.

COMMUNICATION AND INTERPERSONAL SKILLS

Communication and interpersonal skills

Excellent verbal and written communication skills both in an office environment and with external stakeholders.

Experienced at giving presentations to large audiences.