PUBLICATIONS DE L'EQUIPE(2019-2023)

2023

- Dramane S.I. Kanté, Aissam Jebrane, **Adnane Boukamel**, Abdelilah Hakim, (**2023**). A multiscale model to investigate the impact of the ventilationairflow type on the risk of contracting COVID-19 in a closed environment. Proceeding of The 9th International Conference on Modeling, Simulation and Applied Optimization.
- Dramane S.I. Kanté, Aissam Jebrane, **Adnane Boukamel**, Abdelilah Hakim (**2023**). A multi-scale approach driven by population demographic and socio-cultural data to simulating setting-specific respiratory infectious disease transmission patterns: An application to COVID-19 in a Moroccan shopping center. Infectious disease modeling (revision).
- M Rammane, O Elmhaia, S Mesmoudi, O Askour, B Braikat, A Tri, **N Damil** (**2023**). On the use of Hermit-type WLS approximation in a high order continuation method for buckling and wrinkling analysis of von-Kàrmàn plates. Engineering Structures 278, 115498.
- Elmhaia, Y Belaasilia, O Askour, B Braikat, **N Damil** (**2023**). Numerical analysis of frictional contact between crack lips in the framework of Linear Elastic Fracture Mechanics by a mesh-free approach. Theoretical and Applied Fracture Mechanics, 103749.
- Yang Jie; Li Ping; Zhang Yi; Hui Yanchuan; Xu Lihua; **Damil Noureddine**; Hu Heng May (**2023**). Unified functional based data-model-coupling computing for composite materials and structures. Composite Structures. Volume 31215. Article number 116840.

2022

- **A Ouardi, A Boukamel**, **N Damil** (**2022**). Towards a macro-chain polymer model using a micromechanical approach. Constitutive Models for Rubber XII, Chapitre, 112-117.
- Dramane S.I. Kanté, Aissam Jebrane, **Adnane Boukamel**, Abdelilah Hakim (**2022**). Estimating social contact matrices using a modified social force model and socio-cultural data, Fourth Edition of the International Conference on Research in Applied Mathematics and Computer Science Casablanca, Morocco, 24-26 March.
- C El Kihal, O Askour, A Hamdaoui, B Braikat, **N Damil**, M Potier-Ferry (**2022**). Convergence acceleration by Padé approximants in the ANM algorithm for large strain elasto-plasticity. Finite Elements in Analysis and Design, 103853.
- C El Kihal, O Askour, Y Belaasilia, A Hamdaoui, B Braikat, **N Damil** (**2022**). Asymptotic numerical method for finite plasticity. Finite Elements in Analysis and Design 206, 103759.
- M Rammane, S Mesmoudi, A Tri, B Braikat, **N Damil** (**2022**). Mesh-free model for Hopf's bifurcation points in incompressible fluid flows problems. International Journal for Numerical Methods in Fluids;1–16.
- H Achref, Mohri Foudil, **Damil Noureddine** (**2022**). Analytical and finite element analyses of flexural and torsional buckling of I-columns with discrete braces. Thin-Walled Structures 174, 109100.
- C El Kihal, O Askour, Y Belaasilia, A Hamdaoui, B Braikat, **N Damil** (**2022**). Simulation of a 2D Large Transformation Elastoplasticity Problem Using the ANM**.** Chapitre International Conference on Numerical Modelling in Engineering, 185-193.

2021

- Dramane S.I. Kanté, Abdelkarim Lamghari, Aissam Jebrane, **Adnane Boukamel**, Abdelilah Hakim (**2021**). A crowd dynamics-based approach to estimate contact matrices for epidemiological models. Frontiers in Science and Engineering, edited by Hassan II Academy.
- Dramane S.I. Kanté, Aissam Jebrane, **Adnane Boukamel**, Abdelilah Hakim (**2021**). A hybrid approach for COVID-19 transmission on different sites using demographic and social interaction data,

International Conference on Mathematics & Data Science 2 (ICMDS-2021) Khouribga, Morocco, 28-30 October.

- AM Estepa, F Massa, **A Boukamel**, T Tison, P Champagne, S Méo, A Wolf (**2021**) Rubber, Experimental and Numerical Investigations for Quantifying Variability of NR Mechanical Properties after Thermal Aging, *Chemistry and Technology* 94 (1), 160-179,1.

- Elmhaia, O., Belaasilia, Y., Askour, O., Braikat, B., **Damil, N**. (**2021**). An efficient mesh-free approach for the determination of stresses intensity factors. *Engineering Analysis with Boundary Elements*, *133*, 49-60.

- Rammane, M., Mesmoudi, S., Tri, A., Braikat, B., **Damil, N.** (**2021**). A dimensionless numerical mesh-free model for the compressible fluid flows. *Computers & Fluids*, *221*, 104845.

- Rammane, M., Mesmoudi, S., Tri, A., Braikat, B., **Damil, N.** (**2021**). Bifurcation points and bifurcated branches in fluids mechanics by high-order mesh-free geometric progression algorithms. *International Journal for Numerical Methods in Fluids*, *93*(3), 834-852.

2020

- Elkaimbillah, A., Braikat, B., Mohri, F., & **Damil, N**. (**2020**). A one-dimensional model for computing forced nonlinear vibration of thin-walled composite beams with open variable cross-sections. *Thin-Walled Structures*, 107211.

- Khalil, S., Belaasilia, Y., Hamdaoui, A., Braikat, B., **Damil, N.**, Potier-Ferry, M. (**2020**). A reduced-order modeling based on multi-scale method for wrinkles with variable orientations. *International Journal of Solids and Structures*, *207*, 89-103.

- Rammane, M., Mesmoudi, S., Tri, A., Braikat, B., **Damil, N.** (**2020**). Solving the incompressible fluid flows by a high-order mesh-free approach. *International Journal for Numerical Methods in Fluids*, *92*(5), 422-435.

2019

- Khalil, S., Belaasilia, Y., Hamdaoui, A., Braikat, B., Jamal, M., **Damil, N.**, Azari, Z. (**2019**). ANM analysis of a wrinkled elastic thin membrane. *Comptes Rendus Mecanique*, *347*(10), 701-709

- Ayane, R., Hamdaoui, A., Braikat, B., Tounsi, N., **Damil, N.** (**2019**). An improved Padé approximant in the ANM algorithm: Application to the post-buckling of shells. *Finite Elements in Analysis and Design*, *167*, 103330.

- El Kaimbillah, A., Bourihane, O., Braikat, B., Jamal, M., Mohri, F., **Damil, N.** (**2019**). Efficient high-order implicit solvers for the dynamic of thin-walled beams with open cross section under external arbitrary loadings. *Discrete & Continuous Dynamical Systems-S*, *12*(6), 1685.

- Ayane, R., Hamdaoui, A., Braikat, B., Tounsi, N., **Damil, N.** (**2019**). A new analytical formula to compute the step length of Padé approximants in the ANM: Application to buckling structures. *Comptes Rendus Mécanique*, *347*(6), 463-476.

- S Lejeunes, D Eyheramendy, **A Boukamel**, A Delattre, S Méo, KD Ahose. (2018), A constitutive multiphysics modeling for nearly incompressible dissipative materials: application to thermo–chemo-mechanical aging of rubbers *Mechanics of Time-Dependent Materials* 22 (1), 51-66,12.