

# 10<sup>th</sup> International Plant Biomechanics Conference

## Posters and flash talks — Tuesday Aug 23<sup>rd</sup> 2022

There is one poster sessions and 3 slots for flash talks (see programme).

Emails are given to enable contact with/from remote participants (during or outside the scheduled poster session). Remote presenters are highlighted in **yellow**.

Flash talk slot #	Poster #	Title	Speaker
4	1	Keeping in touch — Hechtian strands connect the plasma membrane to the cell wall	Dickmann Johanna <johanna.dickmann@ens-lyon.fr>
4	2	Minimizing the elastic energy by conformal growth: the case of <i>Monstera deliciosa</i>	Dai Anna <anna.dai@phys.ens.fr>
4	3	Force generation in coiling tendrils of the climbing passion flower <i>Passiflora caerulea</i>	Klimm Frederike <frederike.klimm@biologie.uni-freiburg.de>
4	4	Why are the stems of fiber crops so slender?	Gorshkova Tatyana <gorshkova@kibb.knc.ru>
4	5	Radial growth and stress patterning of the plant stem	Höfler Mathias <mathias.hoefler@tum.de>
4	6	Cell-type-specific behaviour underlies cellular growth variability in plants	Le Gloanec Constance <constance.le.gloanec@umontreal.ca>
4	7	A front propagation model for leaf morphogenesis	Le Scao Camille <camille.lescao@gmail.com>
4	8	Plant puzzle cell shape is an adaptation to a developmental constraint based on mechanical stress and isotropic growth	Majda Mateusz <mateusz-majda@outlook.com>
4	9	Sepal morphogenesis and cellulose synthase guidance	Mollier Corentin <corentin.mollier@ens-lyon.fr>
4	10	Mechanics of transition from dormancy to growth in <i>Marchantia</i>	Muller Elise <emuller@clipper.ens.psl.eu>
4	11	On the mechanical origins of waving, coiling and skewing patterns in <i>Arabidopsis thaliana</i> roots	Porat Amir <amirporat@mail.tau.ac.il>
5	12	Understanding how flowering plants build communication devices on their petals	Riglet Lucie <lucie.riglet@slcu.cam.ac.uk>
5	13	Molecular mechanisms controlling the interdependency between cell expansion and cell differentiation	Svolacchia Noemi <noemi.svolacchia@uniroma1.it>
5	14	Paf1C denoises transcription and growth patterns to achieve organ shape reproducibility	Trinh Duy Chi <duy-chi.trinh@ens-lyon.fr>
5	15	Unlock the walnut: Shell development of <i>Juglans regia</i> visualized in 3D	Antreich Sebastian <sebastian.antreich@boku.ac.at>
5	16	Mechano-biology of cambium: influence of mechanical interactions between wood and bark on wood formation	Boursat Thomas <thomas.boursat@umontpellier.fr>
5	17	Mechanisms underlying gravitropic and autotropic recovery in poplar	Caulus Alexandre <alexandre.caulus@doctorant.uca.fr>
5	18	The multiple mechanosensitive responses of wood formation to bending: a matter of sign of the strains, dose, and sensitivity adjustments	Decourteix Melanie <melanie.decourteix@uca.fr>
5	19	Mechanosensing tailors the inside tree biomass allocation in beech poles	Dlouha Jana <jana.dlouha@inra.fr>
5	20	A Multiscale Micro-Biomechanical Analysis of the Tangential Cell Wall of the Coniferous Tracheid - Biomimetic Application	Gosse Jon <jon.gosse@icmedesign.com>
5	21	Validation of Numerical Model of Tree Dynamic Response by Optical Measurements	Vojackova Barbora <barbora.vojackova@mendelu.cz>
6	22	Validation of a Device to Measure High-Throughput Crop Strength	<b>Bennett Clayton</b> <b>&lt;LDW678@mocs.utc.edu&gt;</b>

6	23	DARLING — Device for Accessing Resistance to Lodging IN Grains	Dekold Joe <deko6395@vandals.uidaho.edu>
6	24	Measuring the axial variation in flexural stiffnesses of septated plant stems	Martin-Nelson Nathanael <nathanael_pb22@fishface.33mail.com>
6	25	Rapid Generation of Specimen Specific Finite Element Models of Plant Stems	Oduntan Yusuf <odun3492@vandals.uidaho.edu>
6	26	Quantifying Sources of Experimental Error in Bending Strength and Stiffness Measurements.	Rwauya Pearl <prwauya@uidaho.edu>, Bennett Clayton <benn6576@vandals.uidaho.edu>, Robertson Daniel <danieljr@uidaho.edu>
6	27	Stem Failure Initiation and Progression	Steele Kirsten <kirstensteele7@gmail.com>
6	28	Development of Testing Standards for Plant Biomechanics	Tabaracci Kaitlin <taba4048@vandals.uidaho.edu>
6	29	Energy-based overset finite element method for 3-D deformation simulation for plants.	Tomobe Haruka <tomobe.h.aa@m.titech.ac.jp>
6	30	Getting old is hard: biomechanical changes during the maturation of stomatal guard cells	Jaafar Leila <lqj5193@psu.edu>
6	31	Mechanical control of seed shape in Arabidopsis	Bauer Amélie <amelie.bauer@ens-lyon.fr>
no	32	Good vibrations. Some analytical advances on leaf vibration analysis	Garcia Frédérick <frederick.garcia@inrae.fr>
no	33	Phosphoinositide phosphates dependent regulation of Microtubules dynamic by MDP25 in A. thaliana pavement cells	Léger Ophélie <ophelie.leger@uni-tuebingen.de>
no	34	Imaging the dynamics of symbiotic network architecture reveals a traveling-wave foraging strategy for trade	Bisot Corentin <corentin.bisot@ens-lyon.fr>
no	35	Pavement cells of Arabidopsis thaliana dwarf mutant - growth analysis	Borowska-Wykret Dorota <dorota.borowska-wykret@us.edu.pl>, Wodniok Wiktoria <>wiktoria.wodniok@gmail.com>
no	36	Engineering Biological Complexity: Auxin-Driven Pattern Formation and Emergence in Yeast	Hernández Fernández Oliver <oh120@jc.ac.uk>
no	37	Geometry reconstruction of 3D vascular patterns from confocal microscopy imagery.	Kokosza Andrzej <andkok@amu.edu.pl>
no	38	Understanding the curvature of the Arabidopsis ovule	Ray Ratula <ratula.ray@tum.de>
6	39	Automating Cell Wall Finite Element Models from Microscope Images	Christopher Stubbs <cstubbs@fdu.edu>
no	40	How mechanical signals contribute to plant resilience after drastic pruning: the case of pollard trees	Lang Marianne <marianne.lang@ens-lyon.fr>
no	41	Analysis of geometry simplification in frequency-resonance method for non-destructive assessment of stem	Tippner Jan <jan.tippner@mendelu.cz>
no	42	Actin mediated avoidance of tricellular junction influences global topology and phyllotactic robustness at the Arabidopsis shoot apical meristem	Sampathkumar Arun <sampathkumar@mpimp-golm.mpg.de>
no	43	Distribution of non-cellulosic polysaccharides and lignin in tension wood fibers with multi-layered structure in Mallotus japonicus and Ficus erecta Thunb. var. erecta	Yoshinaga Arata <yoshinaga.arata.5a@kyoto-u.ac.jp>
no	44	Regulation of Charra Corallina growth by turgor pressure	Kong Weiyuan <weiyuankong@gmail.com>