

# Program

Sunday 3 October 2021

17h30 – 19h00  
19 h 00

On site registration  
Welcome Party

Monday 4 October 2021

8h00	Introduction		
8h20	R. Tamura : Magnetism of Tsai-type hypermaterials On line	Invited	30 min.
8h50	V. Baledent : Interplay between electronic and spin configurations under magnetic field in multiferroic materials. The case of $GdMn_2O_5$ . On site	Invited	30 min.
9h20	K Nawa : Magnetic Properties of the quasicrystal approximant $Au_{65}Ga_{21}Tb_{14}$ . On line	Contributed	20 min.
9h40	F. Labib : Synthesis and Magnetic Properties of In-Pd-RE 1/1 Approximants. On line	Contributed	20 min.
10 h 00	Break		
10 h 30	F. Damay : Unusual Magnetic Orderings from the Interplay of Triangular Topology and Magnetic Anisotropy. On site	Invited	30 min.
11 h 00	K. Deguchi Strongly : correlated electrons in quasicrystals and approximants. On line	Invited	30 min.
11h 30	T. Sugimoto : Quantum Criticality in a Classical-SpinFibonacci Mille-Feuille Model. On line	Contributed	20 min.
11 h 50	T Trevizam Dorini : Two-dimensional oxide quasicrystal approximants with tunable electronic and magnetic properties. On site	Contributed	20 min.
12 h 10	N. Varela - Rosales : Free energy calculations of 2D and 3D model quasicrystals. On site	Contributed	20 min.
12 h 30	Lunch		
14 h00	M. Souliou : Competing orders in superconducting cuprates:insights from lattice dynamics. On site	Invited	30 min.
14 h 30	M. D'Astuto : Bulk charge density wave and electron-phonon coupling in superconducting copper oxychlorides. On site	Contributed	20 min.
14 h 50	M. Mihalkovic : Three families of quasicrystal approximants in Si, G and Sn nanolayer systems. On site	Contributed	20 min.
15 h 10	Poster Clip session - On site	4 mn/poster	
15 h 40	Break		
17h30-19h	On site Poster session and aperitif		

## Tuesday 5 October 2021

8 h 00	N. Takemori : Theoretical Investigation on Superconducting Hypermaterials. On line	Invited	30 min.
8 h 30	C. Pay Gomez: Structures of RE-Au-Si (RE=Tb, Ho) Quasicrystal Approximants. On line	Invited	30 min.
9 h 00	G. Rai : Bulk topological signatures of a 1D quasicrystal. On line	Contributed	20 min.
9 h 20	H. Takatura : Cluster covering in a Bergman-type $2/1-1/1-1/1$ quasicrystal approximant. On line	Contributed	20 min.
9 h 40	T. Yamada : $2/1$ and $1/1$ cubic approximants in ternary R-Cd-Mg (R= Y, Er) systems. On line	Contributed	20 min.
10 h 00	Break		
10 h 30	Y. Katsura : Data curation projects for quasicrystal-related alloys. On line	Invited	30 min.
11 h 00	E. Lorenzo : Interplay between charge density wave and magnetism: what do we know ? On site	Invited	30 min.
11 h 30	A. Benoit-Gonin : Transport properties of pure AuTe <sub>2</sub> . On site	Contributed	20 min.
11 h 50	S. Kotla : Incommensurately Modulated Rb <sub>2</sub> ZnCl <sub>4</sub> . On site	Contributed	20 min.
12 h 10	J. Stelhorn : Insights into Aperiodic Structures by Atomic Resolution Holography. On line	Contributed	20 min.
12 h 30	Lunch		
14 h 15	Excursion to Marseille		
19 h 00	Dinner		

## Wednesday 6 October 2021

8 h 00	M. Tezuka: Many-body localization in quasiperiodic systems and effect of nonhermitian terms. On line	Invited	30 min.
8 h 30	E. Svanitze : Physical and chemical properties of complex intermetallic compounds. On line	Invited	30 min.
9 h 00	S. Sarkar : An experimental investigation of bulk electronic structure of high-order approximants and quasicrystal. On line	Contributed	20 min.
9 h 20	V. Singh : Thick quasiperiodic Sn layer. On line	Contributed	20 min.
9 h 40	J. Grin : Superconductivity of metastable intermetallic compounds. On line	Contributed	20 min.
10 h 00	Break		
10 h 30	A. Minelli : Evolution of the CDW-type in the monophosphate tungsten bronzes family. On site	Invited	30 min.
11 h 00	M. Groshe : Strong coupling superconductivity in incommensurate host-guest structures. On site	Invited	30 min.
11 h 30	C. Ruano : Complex 2D oxide phases in reduced SrTiO <sub>3</sub> grown on Pt(111)/Al <sub>2</sub> O <sub>3</sub> (0001): an experimental and theoretical approach. On site	Contributed	20 min.
11 h 50	P. Kalouguine : Flat-branched semi-simplicial complexes: a versatile tool for aperiodic solids. On site	Contributed	20 min.
12 h 10	M. Haller : Triangle-square-rhombus tilings arising from anti-phase domain boundaries in the $\sigma$ -phase On line	Contributed	20 min.
12 h 30	Lunch		
14 h	S. Francoal : Resonant Elastic X-ray Scattering at beamline Pog at PETRA III at DESY. On line	Invited	30 min.
14 h 30	I. Mandal : Correlated Insulators in Twisted Bilayer Graphene. On site	Invited	30 min.
15 h	S. Schenk : Large unit cell approximant derived from SrTiO <sub>3</sub> on Pt(111). On line	Contributed	20 min.
15 h 20	C. Aguilar-Maldonado : Complex magnetism in Co-Te systems. On site	Contributed	20 min.
15 h 40	Break		
20 h 00	Workshop Dinner		

## Thursday 7 October 2021

8 h 00	S. Watanabe : Elasticity, crystalline electric field and magnetism in the Yb- and Tb-based quasicrystal and approximant. On line	Invited	30 min.
8 h 30	M. Henriques : Magnetic structure superspace and Jana. On line	Invited	30 min.
9 h 00	U. Lieu : Inverse Design of Two-dimensional Self-assembly of Patchy Particles. On line	Contributed	20 min.
9 h 20	N. Yoshinaga : Bayesian Inference of Phase-Field Crystal Models for Target Crystalline Patterns. On line	Contributed	20 min.
9 h 40	N. Fujita : Pseudo-merohedral twinning of AlCuRu. On line	Contributed	20 min.
10 h	Break		
10 h 30	D. Le Bolloc'h : Deformation of an incommensurate CDW under currents. On site	Invited	30 min.
11 h 00	S. Foerster : Accounting for complexity in periodic systems: A classification scheme for quasicrystal approximants. On line	Invited	30 min.
11 h 30	S. Coates : A 6-fold golden-mean tiling. On line	Contributed	20 min.
11 h 50	R. Lifshitz : Thermodynamic stability of quasicrystals: From fluid dynamics to soft condensed matter. On site	Contributed	20 min.
12 h 10	Closing remarks		20 min.
12 h 30	Lunch		
14 h 00	Departure		