Monday - May 14 2018						
Morning session						
10:00-11:00	11:00-11:30	11:30-11:50	11:50-12:10	12:10-12:30	12:30-12:50	12:50-14:00
Registration & Coffee	**Layering, instability, mixing, interfaces and turbulence in stratified Taylor-Couette flow** ***Singh, Augier, Caulfield, Dalziel, Leclercq, Partridge***	Domain anisotropy and the inverse cascade in geostrophic turbulent convection *Julien, Knobloch, Plumley*	Ultimate RB turbulence through scaling analysis of the temperature structure functions *Krug, Zhu, Verzicco, Marusic, Lohse*	Penetrative convection in noctural surface layer *Kaushal, Singh, Sreenivas*	Measurements of the heat flux and Reynolds number in horizontal thermal convection *He, Yan, Huang, Gu*	**Lunch**
Afternoon session 1						
14:00-14:30	14:30-14:40	14:40-14:50	14:50-15:00	15:00-15:20	15:20-15:40	15:40-16:10
Finite-sized particles in turbulent Taylor-Couette flow ***Bakhuis, Verschoof, Mathai, Huisman, Lohse, Sun***	Controlling heat transport and flow structures in thermal turbulence using ratched surfaces *Jiang, Zhu, Mathai, Verzicco, Lohse, Sun*	Thermal convection in inclined rectangular cell for large Pr number *Jiang, Calzavarini, Sun*	Direct numerical simulation of turbulent RBC in a vertical thin disk *Xu, Wang, He, Yik, Wang, Schumacher, Tong*	A combined experimental and theoretical study of random reversals of the large-scale circulation in a vertical thin disk for turbulent RB convection *Tong, Wang, Song, Lai*	How surface roughness reduces heat transport for small roughness heights in turbulent RB convection *Zhou*	**Coffee**
Afternoon session 2						
16:10-16:40	16:40-16:50	16:50-17:00	17:00-17:10	17:10-17:30	17:30-17:50	
Low Prandtl number convection ***Scheel, Schumacher***	Direct numerical simulations of sheared RB convection *Blass, Zhu, Verzicco, Lohse, Stevens*	Experiments on thermoelectric convection in dielectric liquids in a cylindrical annulus under parabolic flight conditions *Jongmanns, Meyer, Meier, Kang, Mutabazi, Egbers*	Numerical study of thermal convection in cylindrical annulus with solid body rotation *Kang, Mutabazi*	Boundary layers and Nusselt number in rotating RB convection *Ecke*	RB instability under rarefied gas conditions: a direct-simulation Monte Carlo study *Di Staso, Clercx, Toschi*	
18:00 - ca.19:30	**Reception**	**Location: Foyer**				

Tuesday - May 15 2018						
Morning session 1						
09:00-09:30	09:30-09:50	09:50-10:00	10:00-10:10	10:10-10:20	10:20-10:40	10:40-11:10
Flow structures in coriolis-centrifugal convection ***Horn***	Centrifugal effects on the horizontal motion of columnar vortices in rotating RB convection *Zhong, Shi, Lu, Ding*	Heat transfer and scaling laws in RB convection systems with a rotating lid *Sameen, Vishnu*	Transition in Reynolds and Nusselt numbers scaling at Rayleigh numbers 1010-1011 in cryogenic RBC *Musilová, Macek, Urban, LaMantia, Skrbek*	Convective heat transport in two phase-superfluid liquid/vapor system of 4HE *Urban, Hanzelka, Schmoranzer, Skrbek*	Basal melting driven by turbulent thermal convection *Rabbanipour, Esfahani, Hirata, Berti, Calzavarini*	**Coffee**
Morning session 2						
11:10-11:40	11:40-11:50	11:50-12:00	12:00-12:10	12:10-12:30	12:30-12:50	12:50-14:00
The local temperature measurements in rotating RB convection with Pr=12.3 ***Wei***	Turbulent superstructures in thermal convection *Pandey, Scheel, Schumacher*	Transition to coherent structures in turbulent Couette-Taylor flow *Talioua, Prigent, Mutabazi*	Secondary vortices accompanying mixed convection of liquid metal affected by magnetic field *Belyaev, Frick, Sviridov, Razuvanov, Listratov, Zikanov, Biruykov, Sviridov*	Direct numerical simulations of Taylor-Couette turbulence: the effect of sand grain roughness *Berghout, Zhu, Chung, Verzicco, Lohse, Stevens*	Dominant flow structures in axially-homogeneous high Rayleigh number turbulent convection *Pawar, Arakeri*	**Lunch**
Afternoon session 1						
14:00-14:30	14:30-14:40	14:40-14:50	14:50-15:00	15:00-15:20	15:20-15:40	15:40-16:10
Weak formulations of Kármán-Howarth-Monin equation and their application to turbulent and convective flows ***Dubrulle***	Long-term dynamics and extreme events in the wall-shear stress of turbulent convection flows *Bruecker, du Puits*	Measurement of 3D flow structures of turbulent mixed convection in a rectangular sample during reconfiguration events *Mommert, Schiepel, Schmeling, Wagner*	Rotation influenced reorientations of large-scale circulations in RB convection *Vishnu, De, Mishra*	Liquid sodium convection in a short inclined cylinder *Frick, Khalilov, Kolesnichenko, Mamykin, Pavlinov, Shestakov*	Analyzing turbulent large-scale structures as localized self-sustained processes of shear flows *Ostilla Mónico*	**Coffee**
Afternoon session 2						
16:10-16:40	16:40-16:50	16:50-17:00	17:00-17:10	17:10-17:30	17:30-17:50	
RB and Taylor Couette turbulence with wall roughness ***Zhu, Verschoof, Bakhuis, Huisman, Stevens, Sun, Verzicco, Lohse***	Two component turbulent heat convection with phase change *Dhabalia, Arakeri, Govind, Tino*	Numerical modelling of turbulent convection in an asymmetric rough RB cell *Belkadi, Sergent, Podvin*	LSC oscillations in a liquid metal *Vogt, Horn, Grannan, Aurnou*	Turbulent RB convection with rough surfaces *du Puits, Loesch, Salort, Chillà*	Mechanism of axial vortex breakdown in a lid rotating RB convection *Vishnu, Sameen*	

Wednesday - May 16 2018						
Morning session 1						
09:00-09:30	09:30-09:50	09:50-10:00	10:00-10:20	10:20-10:40	10:40-11:10	
Fingering double diffusive convection ***Yang*, Verzicco, Lohse**	Layer formation in the early earth's mantle *Dude, Hansen*	Natural convection in shear-thinning fluids: velocity and temperature measurements by MRI *Métivier, Leclerc, Darbouli, Varé, Nouar, Baymbetov*	Confined inclined thermal convection in low Prandtl number fluids *Zwirner, Shishkina*	Turbulent thermal superstructures in RB convection *Stevens, Blass, Zhu, Verzicco, Lohse*	**Coffee**	
Morning session 2						
11:10-11:40	11:40-11:50	11:50-12:00	12:00-12:10	12:10-12:30	12:30-12:50	12:50-14:00
Scaling relations and boundary layers in natural thermal convection ***Shishkina***	Filtered kinetic energy budget in RB convection *Green, Vlaykov, Mellado, Wilczek*	Inertial modes and turbulence in spherical Couette flow *Barik, Triana, Hoff, Wicht*	Dynamic arrangement of vortical structures in rotating RB convection *Noto, Tasaka, Yanagisawa, Park, Murai*	Non-Oberbeck-Boussinesq effects in the vicinity of saturated vapour curve of ^{4}HE *Urban, Hanzelka, Králík, Musilová, Skrbek*	Bulk temperature and heat transport in turbulent RBC in fluids with temperature-dependent properties *Bodenschatz, Weiss, Shishkina*	**Lunch**
Afternoon session 1						
14:00-14:30	14:30-14:40	14:40-14:50	14:50-15:00	15:00-15:20	15:20-15:40	15:40-16:10
Turbulent rotating convection to the extreme ***Cheng, Aguirre Guzman, Madonia, Kunnen***	Thermally inertial particles in RB convection *Alards, Kunnen, Clercx, Toschi*	Experimental investigation on heat transport in bubbly flow *Gvozdić, Dung, Alméras, Mathai, van Gils, Huisman, Sun, Lohse*	Three-dimensional flow topology evolution in turbulent RB convection *Dabbagh, Triax, Gorobets, Oliva*	Cluster formation and Brownian motion of columnar vortices in rotating RB convection *Chong, Ding, Xia*	Heat transfer and high-order flow modes during the reversal of the large scale-scale circulation in turbulent RBC in rectangular cells *Chen, Xi*	**Coffee**
Afternoon session 2						
16:10-16:40	16:40-16:50	16:50-17:00	17:00-17:10	17:10-17:20	17:20-17:30	17:30-17:50
Glimpsing the flow physics of regime changes in thermal convection ***Chung***	RB convection in thermodependent shear-thinning fluids *Varé, Nouar*	Tomographic particle image velocimetry of RB convection in a cylindrical sample *Paolillo, Greco, Astarita, Cardonne*	Plume visualization in high Prandtl RB convection *Moturi, Funfschilling, Dusek*	Towards numerical simulations of the ultimate state of convection using one-dimensional turbulence modeling *Klein, Schmidt*	Heat exchanger for experimental study of liquid metal convection *Kolesnichenko, Pavlinov, Khalilov, Mamykin, Frick*	Dynamics of the mean wind in turbulent convection in a cubic box *De, Mishra*
18:00 - ca.21:00	**Conference dinner**	**Location: Faculty club**				

Thursday - May 17 2018						
Morning session 1						
09:00-09:30	09:30-09:50	09:50-10:00	10:00-10:10	10:10-10:20	10:20-10:40	10:40-11:10
Heat flux measurements under strongly non-Oberbeck Boussinesq conditions ***Weiss, Valori, Wesenberg, Bodenschatz***	Pattern formation in moist RB convection *Prabhakaran, Krekhov, Weiss, Bodenschatz*	Moist transfer RB convection *Zhang, Xia*	Experimental investigation of a sheared thermally unstable boundary layer *Nunnari, Bodenschatz, Weiss*	An experimental and numerical study of the heat transport in horizontal convection *Ding, Huang, Hu, Chong, Xia*	Turbulent RB convection in a vertical annulus *Xie, Xia*	**Coffee**
Morning session 2						
11:10-11:40	11:40-11:50	11:50-12:00	12:00-12:10	12:10-12:30	12:30-12:50	12:50-14:00
Phenomenology of turbulent thermal convection ***Verma***	Scaling and distribution of viscous dissipation in turbulent RB convection *Bhattacharya, Pandey, Kumar, Verma*	Confined regimes in RB convection using reduced dimensionality models *Castillo-Castellanos, Sergent, Rossi*	Phenomenological Nusselt-Rayleigh scaling of turbulent thermal convection *Liu*	Boundary layers in 2D RB flows in quasilinear approximation *Eckhardt*	Thermoelectric convection in dielectric liquids in a cylindrical annulus *Mutabazi, Kang, Meyer, Jongmanns, Meier, Egbers*	**Lunch**
Afternoon session 1						
14:00-14:30	14:30-14:40	14:40-14:50	14:50-15:00	15:00-15:20	15:20-15:40	15:40-16:10
Boundary layers in turbulent RB convection ***Ching***	Non-Oberbeck-Boussinesq thermal convection of water near its maximum density point *Piumini, Verzicco*	Dielectrically driven convection in spherical gap geometry *Zaussinger, Haun, Neben, Egbers, Mutabazi*	Numerical study of helicity sources in a rotating convection *Teimurazov, Sukhanovskii, Evgrafova, Stepanov*	Structure of plumes in RB convection *Funfschilling, Moturi, Dusek*	Experimental Lagrangian statistics in turbulent RB convection *Salort, Liot, Gay, Martin-Calles, Bourgoin, Chillà*	**Coffee**
Afternoon session 2						
16:10-16:40	16:40-16:50	16:50-17:00	17:00-17:10	17:10-17:20	17:20-17:30	17:30-17:50
The role of turbulent convection in driving geostrophic gyres and overturning circulation ***Gayen, Vreugdenhil, Griffiths***	Understanding of the probability distribution of turbulent temperature fluctuations in a closed RB convection cell *Wang, He, Tong*	Large-scale circulations of turbulent RB convection in a finite liquid metal layer *Akashi, Tasaka, Yanagisawa, Vogt, Murai, Eckert*	Similarity models for corner-roll in RB convection *Zhou, Chen, She*	Multilayer profiles of the mean velocities and temperature in RB convection *Zou, Chen, She*	Kinetic thermal structure (KTS) in turbulent thermal convection *Chen, Yin, She*	

Friday - May 18 2018						
Morning session 1						
09:00-09:30	09:30-09:50	09:50-10:00	10:00-10:10	10:10-10:20	10:20-10:40	10:40-11:10
Convection rolls and fingers in double diffusive convection ***Tilgner***	Dynamics of coupled convection rolls in turbulent RBC *Brown*	An experimental study of internal wave field in a stably thermal stratified fluid layer *He, Huang, Xia*	Contribution of surface thermal forcing to mixing on the ocean *Wang, Huang, Xia*	Flow structures in a weakly turbulent RB convection affected by a horizontal magnetic field *Vogt, Yanagisawa, Ishimi, Tasaka, Tasaka, Eckert*	DNS of RB convection in cylindrical containers with rough plates *Emran, Shishkina*	**Coffee**
Morning session 2						
11:10-11:40	11:40-11:50	11:50-12:00	12:00-12:10	12:10-12:20	12:20-12:50	12:50-14:00
Thermal transfer in RB cell with smooth or rough boundaries ***Rusaouën, Liot, Salort, Castaing, Chillà***	Local Lorentz force and ultrasound Doppler velocimetry in a vertical convection liquid metal flow *Zürner, Vogt, Resagk, Eckert, Schumacher*	Wall modes beyond the Chandrasekhar limit in high-Rayleigh-number magnetoconvection *Liu, Krasnov, Schumacher*	Influence of thermal plumes on Lagrangian acceleration and Eulerian structure in thermal turbulence *Huang, Li, Ni, Xia*	Jet formation in modified RB convection *Xie, Julien, Knoblock*	**Heat transport enhancement in turbulent thermal convection** ***Xia***	**Lunch**