### Wednesday April 12, 2023

**12:00 Registration** – (small snacks will be served)

#### Session 1 Chair: Chris Schön (TUM)

### 14:00 [T1.1] Malcolm Bennett (University of Nottingham, UK)

Uncovering how plant roots use hormones as proxies to sense and respond to soil stresses.

## 14:45 [T1.2] Erwin Grill (TU Munich, DE)

Key regulators of efficient water use in Arabidopsis.

## 15:15 [T1.3] Viktoriya Avramova (TU Munich, DE)

Modulation of water use efficiency and carbon isotope discrimination via ABA catabolism in maize.

#### 15:45 Coffee break and posters (45 min)

## Session 2 Chair: Bernhard Küster (TUM)

# 16:30 [T2.1] Jessica Prenni (Colorado State University, CO, USA)

Periodic table of food initiative enables standardized metabolomics for global food analysis.

## 17:00 [T2.2] Josef Ranner (TU Munich, DE)

Molecular assessment of metabolome alterations in Lotus japonicus roots induced by arbuscular mycorrhiza.

#### Session 3 Chair: Stefanie Ranf-Zipproth (Université de Fribourg)

### 17:30 [T3.1] Steven P. Briggs (UC San Digo, CA, USA)

Maize heterosis is associated with proteome remodeling.

#### 18:00 [T3.2] Harvey A. Millar (University of Western Australia, AUS)

Homeostasis of the plant proteome by control of protein synthesis and degradation.

#### 18:30 Mixer and Posters – drinks and catering

### Thursday April 13, 2023

## Session 4 Chair: Kay Schneitz (TUM)

#### 09:00 [T4.1] Claudia Köhler (MPI, Potsdam-Golm, DE)

Epigenetic basis of endosperm evolution and its consequences for angiosperm diversity.

#### 09:45 [T4.2] Frank Johannes (TU Munich, DE)

Parental pericentromeric methylation status drives genome-wide functional remodeling and heterosis in epigenetic hybrids.

## 10:15 Coffee break (45 min)

## Session 5 Chair: Ralph Hückelhoven (TUM)

#### 11:00 [T5.1] Remco Stam (University Kiel, DE)

Intraspecific diversification of pathogen defence signalling in the wild tomato species *Solanum chilense*.

## 11:30 [T5.2] Mary Beth Mudgett (Stanford University, CA, USA)

Pathway discovery for novel metabolites in response to pathogen attack.

#### 12:00 [T5.3] Silke Robatzek (LMU Munich, DE)

Innate immune sensing of bacteria in the vasculature.

#### 12:30 Lunch (60 min)

## Session 6 Chair: Karina von der Linde (University Regensburg)

# 13:30 [T6.1] Myriam Charpentier (John Innes Centre, Norwich, UK)

Regulation of nuclear calcium signalling in endosymbiosis.

#### 14:00 [T6.2] Giles Oldroyd (University of Cambridge, UK)

Understanding and engineering nodulation.

## 14:30 [T6.3] Caroline Gutjahr (MPI, Potsdam-Golm, DE)

Transcriptional regulation of arbuscular mycorrhiza symbiosis.

### 15:00 Coffee break (45 min)

#### Session 7 Chair: Arne Weinberg (LMU)

### 15:45 [T7.1] Julia Santiago (Université de Lausanne, CH)

Cell wall recognition and patterning by a sensor complex coordinates cell wall architecture and drives pollen tube expansion.

# 16:15 [T7.2] Nitzan Shabek (UC Davis, CA, USA)

Structural plasticity in D3/MAX2 ubiquitin ligase facilitates strigolactone KAI2-mediated signaling pathways.

## Session 8 Chair: Martin Parniske (LMU)

## 16:45 [T8.1] Ulrich Z. Hammes (TU Munich, DE)

Usually multiple acids move in and out transporters are required for amino acid supply of sink tissues and regulate plant growth and nematode development.

# 17:15 [T8.2] Rodion Boikine (TU Munich, DE)

Molecular insight into cell wall integrity signaling in Arabidopsis mediated by the receptor kinase STRUBBELIG.

# 17:45 [T8.3] Finn Hartmann (University Regensburg, DE)

Yes we CAN! – From CANDIDATE selection to characterization of novel plant peptides.

18:15 Dinner – Bräustüberl Weihenstephan

### Friday April 14, 2023

# Session 9 Chair: Corina Vlot-Schuster (University Bayreuth)

# 09:00 [T9.1] Tomokazu Kawashima (University of Kentucky, KY, USA)

Cellular dynamics of coenocytic endosperm in *Arabidopsis thaliana*.

# 09:30 [T9.2] Philipp Denninger (TU Munich, DE)

Establishment and regulation of cell polarity in pollen grains of *Arabidopsis thaliana*.

## 10:00 [T9.3] Stefanie Sprunck (University Regensburg, DE)

Interplay of key proteins during gamete interaction of flowering plants.

## 10:30 Coffee break (45 min)

# Session 10 Chair: Thomas Dresselhaus (University Regensburg, DE)

## 11:15 [T10.1] Jenny Russinova (VIB, Universitiy Gent, BE)

Cell type-specific regulation of brassinosteroid signaling in stomatal lineage.

## 11:45 [T10.2] Ana Cano-Delgado (CRAIG, Barcelona, ES)

Brassinosteroid receptor BRL3 triggers systemic plant adaptation to elevated temperature from the phloem cells.

#### 12:15 [T10.4] Usha Barwale Zehr (Grow Indigo Pvt. Ltd, IN)

Changing face of agriculture in climate uncertainty -Carbon as the new cash crop.

## 13:00 Concluding remarks and end of conference