### Working group 3: High gradient and laser-structure based acceleration

**Tuesday June 15** | **Wednesday June 16** | **Thursday June 17** | **Friday June 18**
---|---|---|---
**Morning II** 10:30-12:00 | WG3: Breakdown in metallic structures | WG3: Transformer ratio | WG3: Wakefields | WG3: Design of complex geometries
Valery Dolgachev – Recent Studies of RF Breakdown Physics in Normal Conducting Cavities | Wei Gai – Progress in dielectric acceleration | James Rosenzweig – High Frequency, High Gradient Dielectric Wakefield Acceleration Experiments at SLAC and BNL | Alexander Mikhailichenko – Fundamental Limitations in Advanced LC Schemes | 15 min

**Joint WG2/WG3:** Electromagnetic modeling | RF devices
**15min** | **15min** | **15min** | **15min**


**Faya Wang** – Performance Limiting Effects in X-band Accelerator Structures | Gennadij Sotnikov – Accelerated bunch stability in a coaxial dielectric wakefield structure when its symmetry is broken | Chenguang Jing – Dielectric-Based Wakefield Power Extractor | Rodney Yoder – Development of a Laser-Powered Dielectric Structure-Based Accelerator as a Stand-Alone Particle Source | 15 min

Brian Munroe – Breakdown Studies of Photonic Bandgap (PBG) Accelerator Structures | Chenguang Jing – Recent Experiment on Wakefield Transformer Ratio Enhancement at AWA | Manoel Conde – Argonne Wakefield Accelerator Facility (AWA) Upgrades and Future Goals | Joshua McNeur – An Examination of Resonance, Acceleration and Particle Dynamics in the Micro-Accelerator Platform | 15 min

**Discussion** 15min | **Discussion** 15min | **Discussion** 15min | **Discussion** 30 min

**LUNCH** | **12:00-1:30** | **25 min** | **Discussion** 30 min | **Discussion** 30 min

**Afternoon I 1:30-3:30** | **WG3:** Breakdown in dielectric structures | **WG3:** Materials | **WG3:** Breakdown theory and modeling | **WG3:** Design and fabrication


Yong Jiang – CVD Diamond RF Breakdown Experiment | G. Shvets – Surface Wave Accelerator Based on Silicon Carbide: First Experimental Results | Dmytro Kashyn – Field, current and heat propagation inside microprotrusions in high-gradient structures | Ben Cowan – Compact photonic crystal couplers for laser-driven acceleration | 15 min


**Discussion** 25 min | **Discussion** 10 min | **Discussion** 25 min | **Discussion** 30 min

**Break 3:00-3:30** | **Afternoon social activities** | **Joint WG2/WG3:** Electromagnetic modeling | **WG3:** RF devices
Alexej Grudieiev – CERN progress in high-gradient investigations | Carl Bauer – The accurate simulation of electromagnetic waves and dielectric structures on a Cartesian grid | Luigi Faillace (A. Murokh) – Ultra-high gradient, compact S-band accelerating structure for laboratory and industrial applications | 15 min

Sergei Kuzikov – Advanced high gradient RF structure development | Arno Candel – Numerical Simulation of Wakefield Damping and Power Transfer in the CLIC Two-Beam Accelerator | Anatoly Vilkharev – High power microwave switch employing electron beam triggering | 15 min

Vyacheslav Yakovlev – First High-gradient Tests of the Single-cell SC Cavity with the Feedback Waveguide | Johnny Ng – Wakefield Simulations for the SLAC Laser Acceleration Experiment | Jeff Neilson – Design of RF Feed System for Standing-Wave Accelerator Structures | 15 min


Yong Jiang – Beam-Driven Multimode Asymmetric Cavity for a High Gradient Accelerator Structure | Cho-Kuen Ng – Simulation of Propagation of Accelerating Mode in Photonic Bandgap (PBG) Fiber | 15 min

Faya Wang – Cryogenic RF material testing with a high-T<sub>c</sub> copper cavity | 15 min | 15 min | 15 min

**Discussion** 20 min | **Discussion** 45 min | **Discussion** 60 min