Dan Pope Session	
Arno Klomfass	The APOLLO Blastsimulator & LS-DYNA Interface for Co-Simulation of Blast-Loading of Structures
Alessandro Dimech	Investigating the effects of urban environments on the time of arrival of blast waves
Sebastien Terrana	Probabilistic yield estimation of the 2020 Beirut Explosion
Sam Rigby	Re-visiting the secondary shock
Genevieve Pezzola	An Experimental Investigation on Coupled Air- and Ground- Shock from Elevated Charge
Mark Whittaker	Development of a numerical capability for simulating non-ideal explosives and reactive materials
James Wurster	A Fast & Accessible Fluid-Structure Interaction Tool
Jonas Rudshaug	Modeling concrete in different load cases – projectile impact, contact detonation and far-field blast loading
Alexander Johnsson	Structural response of reinforced concrete wall elements subjected to blast
Michel Sturtzer	Effects of explosive charges in contact with steel plates: small-scale experimental investigation using high-speed imaging
Alastair Chester	Enhancing Blast Wall Performance: The Impact of adding Crenellations on Overpressure and Impulse Reduction
Daniel Clark	Numerical Analysis of Air-Backed Structures Under UNDEX Loading

Software tools, analytical and numerical modelling	
Henry Lansley	Parameterised exploration into load calculation for structural frame members when subjected to a blast wave using high fidelity simulation
Giovanni Marchesi	High-Fidelity Numerical Modeling of Blast-Loaded Plates
Luis Brunnabend	Equation of states for porous materials. Comparing the p-alpha and the p-epsilon EOS
Edward Gan	Comparison of Simulated Blast Environment Between the Australian and German Blast Simulators
Eric Kjolsing	Framework for Incorporating Secondary Debris Hazards into SDOF Response Limits
Joe Magallanes	Dust and Debris Generated from Structures in Extreme Blast Effects Problems: A Meshfree Fluid-Structure Interaction Numerical Methodology

Underwater explosion (UNDEX)	
Dain Farrimond	Experimental Validation of Viper Underwater Explosion CFD Solvers
Dain Farrimond	Characterisation of Underwater Shock Parameters in Shallow and Open Water Conditions
Fraser Mackay	A Digital Twin for the JASSO Shock Machine
Elliot Tam	Recent improvements in Dstl's capability for modelling UNDEX and associated structural response
Piotr Nowak	A fragmentation assessment method for submerged charges
Sophie Trelat	Investigation on the effects of water-based contact charges

Protective Materials: Experimental investigations and numerical simulations on concrete	
Masuhiro Beppu	Numerical simulation on spalling and scabbing of RC slabs subjected to projectile impact
Henrik Sjøl	Perforation of rigid projectiles into high performance concrete slabs
Ayman Elfouly	Comparative Analysis of Blast Effects on RC Structures Using Applied Element Method and Viper::Blast CFD Solver
Werner Riedel	Combined experimental and numerical study of shock properties of an ultra-high performance concrete
Thomas Braml	Behaviour of multi-layer 3D printed reinforced concrete components under high dynamic loading
Ming Cheng	Numerical Modeling of Contact Detonation Pressure on Rigid and Reinforced Concrete Targets
Marcus Hering	Explosion effects on reinforced concrete structures – A preliminary study of scaling laws
Mohamed Rhouma	Dynamic Response of small-scale circular RC columns subjected to EDST-generated blast loading
Viktor Peterson	Numerical analyses of experimental shock tube testing for reinforced concrete elements sustaining shear failure
Hezi Grisaro	A Model for Predicting the Global Response of Reinforced Concrete (RC) Beams Under Blast Loads Considering Shear and Flexure Modes
Kent Danielson	Modeling Reinforced Concrete Subjected to Blast with Higher-Order Finite Elements
Daniel Schuler	Load-bearing behavior of anchor systems under shock loading
Wessel Geerlof	Concrete mega block wall protection against near-miss artillery threat

Civil protection and security in urban areas	
Nobert Gebbeken	Security and Resilience of Critical Infrastructures
Arturo Montalva	On a risk-based approach to anti-terrorism design of buildings
Magali Arlery	Multiscale experiments and simulations for progressive collapse risk assessment
David Benamou	Progressive collapse due to vbied – a case study
Brian Katz	A Data-Driven AI/ML Approach to Set Objective and Consistent Performance Objectives for High Level of Blast Protection Applications
Martin Larcher	Numerical Simulation of Vehicle Impact on Security Barriers: Generic numerical vehicle models
Joseph Baum	Survivable Design for Community Shelters

Protective Materials: Experimental investigations and numerical simulations on facade elements	
Tormod Grue	Modelling of laminated glass windows – an experimental and numerical study
Luke Pascoe	Characterisation of PVB Glass Adhesion from High Strain Rate Mechanical Testing and Implications for Blast Resistant Glazing Systems
Achim Pietzsch	Analysis of the load-bearing behaviour of catcher-cable systems for hazard prevention for windows under blast loads
Ola Wattad	Heat Map-Based Evaluation of Aluminum Foam Cladding Performance for Structural Damage Mitigation over a Wide Load Spectrum

Aldjabar Aminou	Deformation attenuation of corrugated panels under blast loading with mineral foam-based sacrificial cladding
Alessandro Stocchi	Performance assessment of a facade greening system under blast loads
George Kantrales	Static and Dynamic Capacities of Conventional Curtain Wall Connections

Protective Materials: Experimental investigations and numerical simulations on steel, wood and masonry	
James Nelson	Steel Column Analytical Models in Version 4 of the Column Blast Analysis and Retrofit Design (CBARD) Software Tool
Jaswanth Gangolu	Influential Explanatory Functions for Steel Wide-Flange Columns under Far-Field Detonations
Kira Buchenau	Experimental and Numerical Investigations of Pressure Waves on Screw Connections
Anne Jung	Structure-property relation of cross-laminated timber against contact detonation
Artur Szlachta	Fracture energy of wooden members under contact explosion
Julia Rosin	Assessing the Blast Performance of Masonry Walls: Development and Validation of a Hydrocode Model

Advanced methods in blast analysis	
Adam Dennis	A Direction-Encoded Machine Learning Approach for Peak Overpressure Prediction in Urban Environments
Angela Laycock	A review on the blast and fragmentation resistance of low carbon construction materials subject to terrorist threat
Chris Metcalfe	Advancing automation of building design and characterisation
Eric Williamson	Photogrammetry and Finite Element Modeling to Assess the Residual Capacity of Blast-Damaged Concrete Bridge Piers

Explosives and blast propagation	
Andrew Tyas	Experimental and numerical studies of confined blast from detonation of plasticised high explosives in reactive and non-reactive atmospheres
Andrew Barr	Rapid thermochemical predictions of internal detonations using plasticised explosives
Rolf Dalenius	Numerical consideration of pressure and impulse density in tunnels at different shapes of an exploding charge in or close to the opening
Jiri Pachmann	Possible Explanation of the Dependence of TNT Equivalent on Scaled Distance
Kellan Sullivan	Investigating the Effects of Blast Wave Pressure Around a Double Barrier System
Alin Mihali	Explosion consequences assessment in buildings with complex geometries
Joseph Baum	Blast Wave Propagation Through Debris Cloud

Experimental investigations, testing and measurement methods	
David Denzler	Development of an internal shock tube imaging procedure for the analysis of structural behavior of NBC protection components during air blast loading
John Hoemann	Correction for realistic cylindrical charge configurations used in experimental testing
Lewis Tetlow	Experimental assessment of near-field blast loading using digital image correlation

Ross Waddoups	Validation of Numerical Modelling of Explosive Ground Shock Propagation in Dry Sand with Digital Image Correlation Experiments

Penetration into layered targets

Stefan Greulich	Model approaches for simulating the interaction of EFP systems with modern target structures consisting of ERA and armor
John Puryear	Multi-shock panels for defeating an explosively formed projectile
Michelle Yokota	SPH Analysis of Fragment Impact into a Layered Target
Jan Teland	Penetration into rock-rubble overlays

Blast walls and testing

Kai Fischer	Dynamic response on lightweight walls due to blast loading
Tomasz Gajewski	Experimental Analysis of Car Bomb Explosions: Fragmentation Patterns and Blast Wave Dynamics
Tommy Lodge	Blast testing of explosive charges buried in frozen soil

Ammunition storage and manufacturing

Sina Dittmann	ECM (Earth Covered Magazine) – Sample design for a modular ammunition storage facility
Jelme Pennings	Modelling the combined internal blast and fragment loading from detonation of artillery shells in reinforced concrete storage magazines.
Dieter van der Pol	Preliminary source function to predict debris throw of earth covered magazines due to an accidental internal explosion
Eric Hansen	Modeling and Simulation-Supported Design of Protective Structures for Ammunition Manufacturing

WERMS / MOUT Session (Releasable to NATO)

Randy Anderson	Modeling, Simulation, and Analysis (MS&A) Pipeline
Albrecht Bongartz	Overview and Findings of Shoulder-Fired Weapon Test Program
Albrecht Bongartz	Testing the Effects of External and Internal Detonations on a Simple Infrastructure
Roosevelt Davis	Measuring and Analyzing the Airblast Environment within a Multi-room Structure Consisting of Opened, Closed, and Sealed Doors
Stefan Greulich	Study on the influence of pre-damage from multiple hits on component resistance under blast loading
Florian Meltzow	Tabulated Penetration Simulation Model
Alan Ohrt	An Analysis of Casing Effects and Concrete Dust on Airblast From Internal Detonations
Christoph Sauer	Penetrating impacts on fiber reinforced concrete – hydrocode simulations, ballistic tests, and model application
Robert Dorgan	A Modeling Framework for Automated Munition Effect Assessments
Ernest Staubs	Overview of Joint Weapon Effects Research
Mark Green	US/GE Joint Penetration Experiments against Advanced Strength Concretes

SHIELD Session (Releasable to NATO and SHIELD nations)	
Orlando Soto	Test-article blast loading and structural response predictions in the shield test
Arno Klomfass	CFD analysis of the blastwave generated in the shield test
Denis Rickman	Analysis of the Ground Crater Produced on the SHIELD 2019 Test
Photios Papados	ALASKA WALL SYSTEM: Experimental and Numerical Comparisons of a Cost-Effective Mitigation Scheme
Hans Dirlewanger	Effect of improvised explosive loadings on different variants of wall systems based on alaska elements
Christoph Roller	Structural Behavior of Multi-component Perimeter Walls - Numerical Study of SHIELD21 Tests
Balz Cavelti	Survivability of people exposed to a large blast in the swiss modular protective system
Fabio Brantschen	Protective performance of ammunition magazines: development of analytical method and application to CUIRA 2022
Martin Hummel	Analysis of HS Videos - Debris Velocities and Angles
Peter Nussbaumer	Evaluation of Airblast data from a test series with earth covered magazines
Peter Nussbaumer	Collection and Evaluation of Debris data

NATO Session (Releasable to NATO)	
David Bogosian	Validation of Codes for Prediction of Internal Airblast
Damien Bouriquet	Experimental setup development to simulate warhead fuze loading in high-velocity penetration regim
Omar Esquilin-Mangual	Modular Protective System – Overhead Cover Evaluation Against Emerging Threats
Shelley Huntley	Blast performance of curtain wall retrofits: Phase II – testing results
Ted Krauthammer	Combined blast-fragment effects on RC slabs
Ted Krauthammer	Timber-based roof for expeditionary modular munition storage system
James Turton	Simple secondary combustion, how good can it be? Determining a set of afterburn coefficients within the software Viper::Blast
Michelle Yokota	Effects of aluminized explosive on internal airblast
Marcus Barksdale	Characterization of Simplified Surrogate Munition