PRESENTATION SCHEDULE DETAIL

TUESDAY, SEPTEMBER 24

MORNING

7:00–8:00	**BREAKFAST & REFRESHMENTS**
7:45–8:00	WELCOME Kelly Senecal, *Convergent Science*
8:00–8:40	**KEYNOTE** THE FUTURE OF COMPUTING: BIG DATA, BIG COMPUTE AND DIGITAL TRANSFORMATION Joris Poort, *Rescale*
8:40–9:05	ACCELERATING DESIGN OPTIMIZATION USING MACHINE LEARNING AND HPC Opeoluwa Owoyele, *Argonne National Laboratory*
9:05–9:30	CFD-BASED FEATURE ENGINEERING FOR NOX MACHINE LEARNING MODEL Saurabh Sharma, *Isuzu Technical Center of America*
9:30–9:55	COMBUSTION SYSTEM DESIGN OPTIMIZATION FOR A HEAVY DUTY GASOLINE CI ENGINE Meng Tang, *Aramco Research Center-Detroit*
9:55–10:10	SPONSOR PRESENTATION *TotalCAE*
10:10–10:30	BREAK
10:30–10:55	ENABLING NEW APPLICATIONS WITH CONVERGE V3.0 Tristan Burton, *Convergent Science*
10:55–11:20	AERODYNAMIC CHARACTERIZATION OF AN UNMANNED AERIAL SYSTEM VIA 3D CFD SIMULATIONS I-Han Lui, *Argonne National Laboratory*
11:20–11:45	CFD MODELING OF FLAME SPRAY PYROLYSIS FOR LARGE-SCALE MANUFACTURING APPLICATIONS Debolina Dasgupta, *Argonne National Laboratory*
11:45–12:00	SPONSOR PRESENTATION *Tecplot*
12:00–1:30	**LUNCH**

AFTERNOON / EVENING

1:30–1:55	SIMULATION OF FLAME PROPAGATION IN AN ANNULAR COMBUSTOR Haiwen Ge, *Texas Tech University*
1:55–2:20	NUMERICAL MODELING OF SUPERSONIC COMBUSTION IN ROTATING DETONATION ENGINES Pinaki Pal, *Argonne National Laboratory*
2:20–2:45	WHAT V3.0 DELIVERS FOR AFTERTREATMENT AND GAS TURBINES Scott Drennan, *Convergent Science*
2:45–3:00	SPONSOR PRESENTATION *Rescale*
3:00–3:20	BREAK
3:20–4:00	**KEYNOTE** NUMERICAL SIMULATION OF PHYSIOLOGICAL FLOWS Alejandro Roldán-Alzate, *University of Wisconsin–Madison*
4:00–4:25	PARAMETRIC STUDIES ON AXIAL AND RADIAL CLEARANCES IN A BLOOD PUMP Choon-Sik Jhun, *Penn State University*
6:00–10:00	**DINNER + RIVER CRUISE** Steamboat NATCHEZ Reservation required. Transportation provided. Please meet in venue hotel lobby at 5:30p.

WEDNESDAY, SEPTEMBER 25

MORNING

7:00–8:00	**BREAKFAST & REFRESHMENTS**
7:50–8:00	WELCOME BACK Elizabeth Favreau, *Convergent Science*
8:00–8:40	**KEYNOTE** ITCA'S WAY FORWARD? MAYBE! Bruce Vernham, *Isuzu Technical Center of America*
8:40–9:05	INTERNAL NOZZLE FLOW SIMULATIONS ACCOUNTING FOR GAS WITHIN THE SAC AND INJECTOR ELASTICITY Lyle Pickett, *Sandia National Laboratories*
9:05–9:30	FUEL EFFECTS IN MULTIPHASE FLOW MODELING FOR SI AND CI CONDITIONS AND INJECTORS Lorenzo Nocivelli, *Argonne National Laboratory*
9:30–9:55	SPRAY A MODELLING USING CONVERGE Rajes Ram Muthukumar, *Texas Tech University*
9:55–10:15	BREAK
10:15–10:40	THE IMPORTANCE OF NON-SPHERICAL DROPS IN SUPERCRITICAL FUEL INJECTION Tuan Nguyen, *Sandia National Laboratories*
10:40–11:05	NUMERICAL STUDY OF PRE-CHAMBER IGNITION IN A GASOLINE DIRECT-INJECTION ENGINE Anqi Zhang, *Aramco Research Center-Detroit*
11:05–11:30	STATE-OF-THE-ART IN PRE-CHAMBER SPARK-IGNITION MODELING Joohan Kim, *Argonne National Laboratory*
11:30–11:55	INVESTIGATIONS ON PASSIVE PRE-CHAMBER IGNITION DEVICE Adele Poubeau, *IFP Energies nouvelles*
12:00–1:30	**LUNCH**

AFTERNOON / EVENING

1:30–1:55	LES OF STRATIFIED LOW TEMPERATURE COMBUSTION ENGINES USING CONVERGE Aimilios Sofianopoulos, *Convergent Science*
1:55–2:20	POTENTIAL EFFICIENCY IMPROVEMENTS WITH CO-OPTIMIZATION OF FUELS AND ENGINES Chao Xu, *Argonne National Laboratory*
2:20–2:45	STUDY OF THE SOOT FORMATION IN A GDI SPRAY USING LASER-INDUCED PLASMA IGNITION Fabien Tagliante, *Sandia National Laboratories*
2:45–3:10	CFD STUDY OF TSCI WITH WET ETHANOL: SPRAY ANGLE EFFECT ON THERMAL STRATIFICATION Mozhgan Rahimi Boldaji, *Clemson University*
3:10–3:30	BREAK
3:30–3:55	CI AND SI ENGINE APPLICATIONS WITH ECFM AND ECFM3Z Olivier Colin, *IFP Energies nouvelles*
3:55–4:20	USING THICKENED FLAME MODEL AND AMR FOR TURBULENT COMBUSTION MODELING Cedric Mehl, *IFP Energies nouvelles*
4:20–4:45	RECENT PROGRESS OF THE COMPUTATIONAL CHEMISTRY CONSORTIUM Henry Curran, *NUI Galway*
4:45–5:10	CONVERGE 3.0 RESULTS AND LOOKING AHEAD TO 3.1 Keith Richards, *Convergent Science*
5:10	CLOSING REMARKS