

1st GLOBAL RESEARCH PLATFORM WORKSHOP

September 17 - 18, 2019 | UC San Diego, La Jolla, CA
Qualcomm Institute - Calit2 | Atkinson Hall

PROGRAM

	TUESDAY, SEPTEMBER 17
8:30-12:00	Americas' Research Platform (AmRP) – formerly GLIF Americas (optional, no separate registration)
12:00-1:00	Lunch – AmRP and GRP attendees
1:00-1:15	Welcome and GRP Overview – Joe Mambretti, Northwestern Univ. (NU)
1:15-1:45	Keynote – Moderator: Joe Mambretti, NU Research Platforms: Past, Present, Future – Larry Smarr, Calit2/UC San Diego (30 min)
1:45-3:00	Panel 1 Theme: GRP Cyberinfrastructure – Moderator: Shawn McKee, University of Michigan <ul style="list-style-type: none">• Science DMZ Global Consideration — Tom DeFanti, UC San Diego/QI-Calit2 (15 min.)• Large Hadron Collider Open Network Environment – Bill Johnston, ESnet (15 min.)• Nautilus & IceCUBE/LIGO – Igor Sfiligoi, UC San Diego, SDSC (15 min.)• Campus Cyberinfrastructure, as implemented on a UC campus – Valerie Polichar, UC San Diego (15 min.)• Panel Q&A (15 min.)
3:00-3:30	Coffee Break
3:30-5:00	Panel 2 Theme: GRP Application Drivers – Moderator: Maxine Brown, UIC <ul style="list-style-type: none">• SKA – Shaun Amy, Australia Telescope National Facility (15 min.)• LSST – Jeff Kantor, LSST (15 min.)• Key Global Application Drivers in Korea and Asia – Buseung Cho, KISTI/KREONet (15 min.)• KSTAR and International Collaborators – Si-Woo Yoon, Korea Superconducting Tokamak Advanced Research (KSTAR) (15 min.)• High-Luminosity LHC – Harvey Newman, Caltech (15min.)• Panel Q&A (15 min.)
5:00-7:00	Reception and Demo Posters
	WEDNESDAY, SEPTEMBER 18

8:30-9:00	<p>Keynote – Moderator: Joe Mambretti, NU</p> <p>Infrastructure SINET 100G Global Ring and Data Exploitation – Tomohiro Kudoh, University of Tokyo (30 min.)</p>
9:00-10:00	<p>Panel 3 Theme: Globally Distributed Data Fabrics – Moderator: Marek Michalewicz, University of Warsaw</p> <ul style="list-style-type: none"> • Globally Distributed Secure Data Exchange Fabrics – Cees de Laat, University of Amsterdam (15 min.) • Data Lakes, Data Caching for Science: OSIRIS Distributed Storage Systems – Shawn McKee, University of Michigan (15 min.) • Open Storage Network — Christine Kirkpatrick, UC San Diego, SDSC and National Data Service (15 min.) • Panel Q&A (15 min.)
10:00-10:30	<p>Coffee Break</p>
10:30-12:15	<p>Panel 4 Theme: Data Movement Services – Moderator: Tom DeFanti, UC San Diego/ QI-Calit2</p> <ul style="list-style-type: none"> • SCAsia Data Mover Challenge – Andrew Howard, Australian National University (15 min.) • Big Data Express – Wenji Wu, Fermilab (15 min.) • DTN as a Service – Jim Chen, NU (15 min.) • Next-Generation DTN Architecture/Kubernetes – John Graham, UC San Diego/ QI-Calit2 (15 min.) • The OSG Data Federation – Frank Wuerthwein, UC San Diego (15 min.) • Machine Learning for Networking – Anna Giannakou, Lawrence Berkeley Lab (15 min.) • Panel Q&A (15 min.)
12:15-1:15	<p>Lunch</p>
1:15-1:45	<p>Keynote – Moderator: Cees de Laat, U Amsterdam</p> <p>ESnet6 as an International Science DMZ Fabric — Inder Monga, ESnet (30 min.)</p>
1:45-3:00	<p>Panel 5 Theme: Programmable Networking – Moderator Andrew Howard, Australian National University</p> <ul style="list-style-type: none"> • KREONET-S: Virtually Dedicated and Automated Networking over SDN-WAN – Dongkyun Kim, KISTI (15 min.) • SDN/SDX – John Hess, CENIC (15 min.) • AutoGole/MEICAN/NSI – Gerben van Malenstein, SURFnet (15 min.) • P4 and other Federated International Network Research Testbeds – Joe Mambretti, NU (15 min.)

	<ul style="list-style-type: none"> • Panel Q&A (15 min.)
3:00-3:30	Coffee Break
3:30-4:45	<p>Panel 6 Theme: Next Generation Optical Networking – Moderator: Yves Poppe, NSCC</p> <ul style="list-style-type: none"> • CESNET Developments in Optical Networking – Michal Krsek, CESNET (15 min.) • Quantum Networking – Eden Figueroa, Stonybrook/Brookhaven (15 min.) • ESnet SDN-enabled for Big Data Science – John MacAuley, ESnet (15 min.) • Agile Optical 400G-800G Optical Networking – Marc Lyonnais, Ciena (15 min.) • Panel Q&A (15 min.)
4:45-5:35	<p>Lightning talks: Global Research Platforms – Moderator: Gerben van Malenstein, SURFnet</p> <ul style="list-style-type: none"> • Asia Pacific Research Platform – Yves Poppe, NSCC (10 min.) • Australian Research Platform – Andrew Howard, Australian National University (10 min.) • Canadian Research Platform – Florent Parent, Compute Canada (10 min.) • EU Activities – Marek Michalewicz, University of Warsaw (10 min.) • Korean Research Platform – Buseung Cho, KISTI/KREONet (10 min.)
5:35-5:55	<p>Closing Session</p> <p>Next Steps – Larry Smarr, Joe Mambretti, Inder Monga</p>