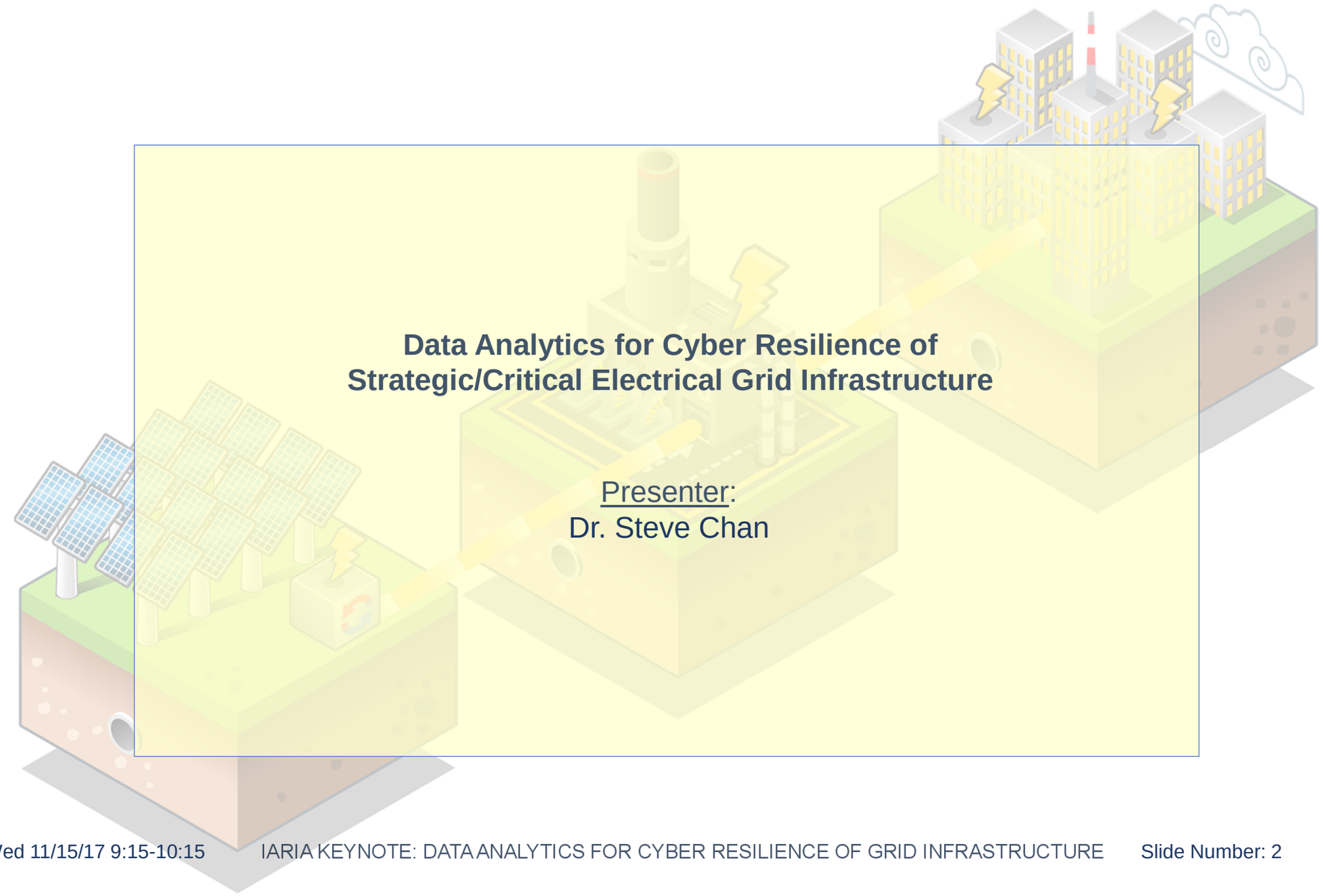
Welcome!

Thank you for joining this session on:

Energy/Cyber Security Assessment
Data Analytics for Cyber Resilience of Strategic/Critical Electrical Grid Infrastructure



Data Analytics for Cyber Resilience of Strategic/Critical Electrical Grid Infrastructure

Presenter:
Dr. Steve Chan

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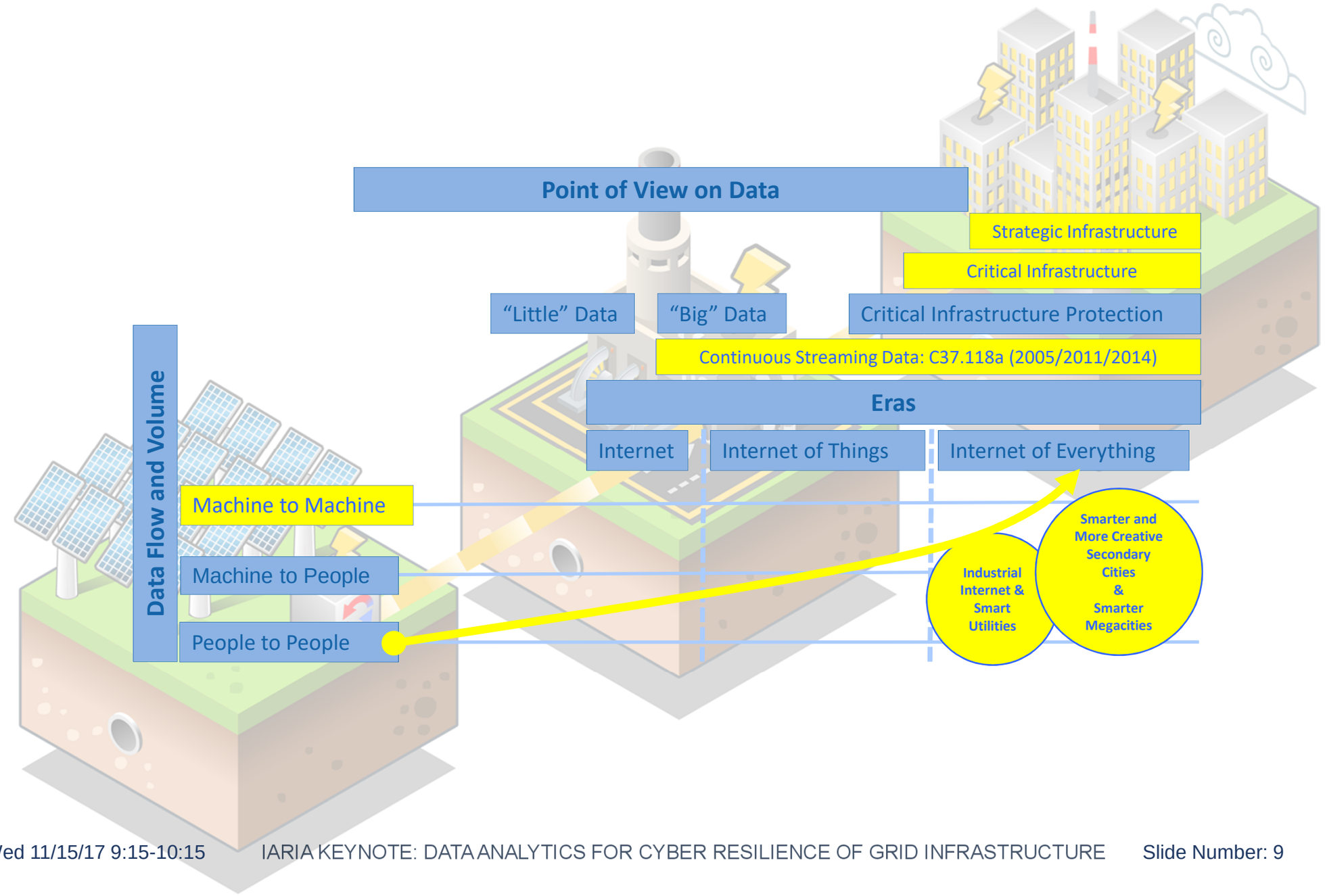
Point of View on Data
Strategic Infrastructure
Critical Infrastructure
"Little" Data
"Big" Data
Critical Infrastructure Protection
Continuous Streaming Data: C37.118a (2005/2011/2014)
Eras
Internet
Internet of Things
Internet of Everything
Data Flow and Volume
Machine to Machine
Machine to People
People to People
Industrial Internet & Smart Utilities
Smarter and More Creative Secondary Cities & Smarter Megacities

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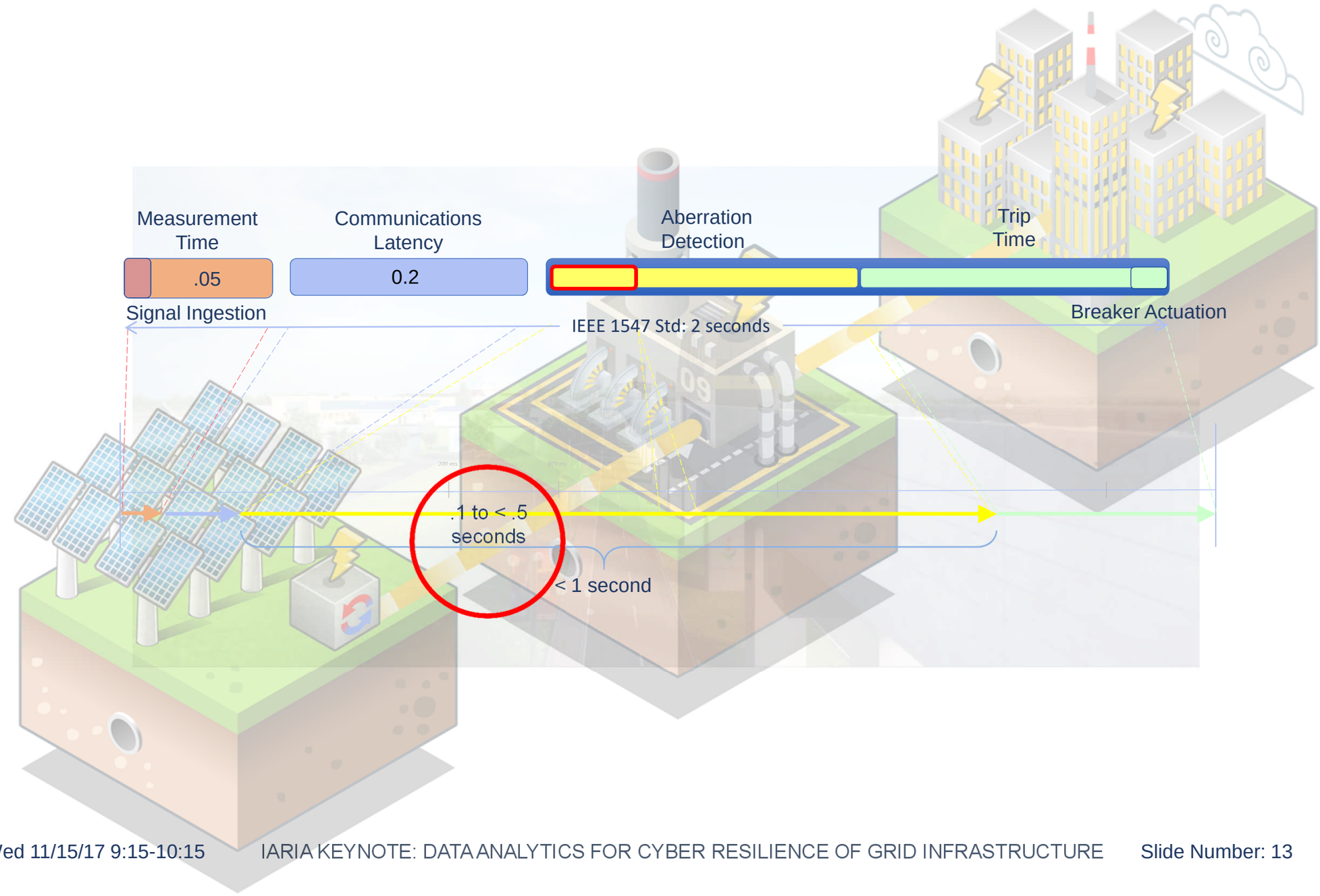
Measurement Time
.05
Communications Latency
0.2
Aberration Detection
Trip Time
Signal Ingestion
IEEE 1547 Std: 2 seconds
Breaker Actuation
.1 to < .5 seconds
< 1 second

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Microgrid Stability Paradox

Microgrids are expected to provide a higher level of availability than the current Grid paradigm. Yet, the microgrids' high use of renewables results in less stable operation of the distribution system and introduces heightened instability.

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…for attending this IARIA Session:

Acknowledgements to Petre, Organizing Committee, Reviewers, and all attending!