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Pitch of the Project Proposal
Real Time Ray Tracing for 5G

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• Enable 5G connectivity, service and vertical application targets

• High capacity links at mm-waves and above require better real-time channel models

• Ray-tracing boosted by accelerated computation is a potential enabler

• Requires collecting information of the environment and data analytics

• Major innovation and business potential
Proposal Introduction (1)

- **Target:** enabling wireless connectivity by real-time ray tracing based channel learning

- **Use cases:** 4G, 5G, 6G etc.

- **Technical aspects:**
  - Efficient computation and acceleration
  - (Bayesian machine) learning and data fusion
  - Electromagnetic modeling of environments
Proposal Introduction (2)

Optimized manually

From months to minutes

Optimized through modelling

Fast, easy to use and better predicted performance service

Technological (R)evolution towards 5G systems

Hand-made, slow turn around
Tentative Finnish Partners

Further discussions on-going
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