R&D phase | Research **Expected Commercialization** | FY28-

Mehr Licht!
More Photonics for Intelligence

#E14

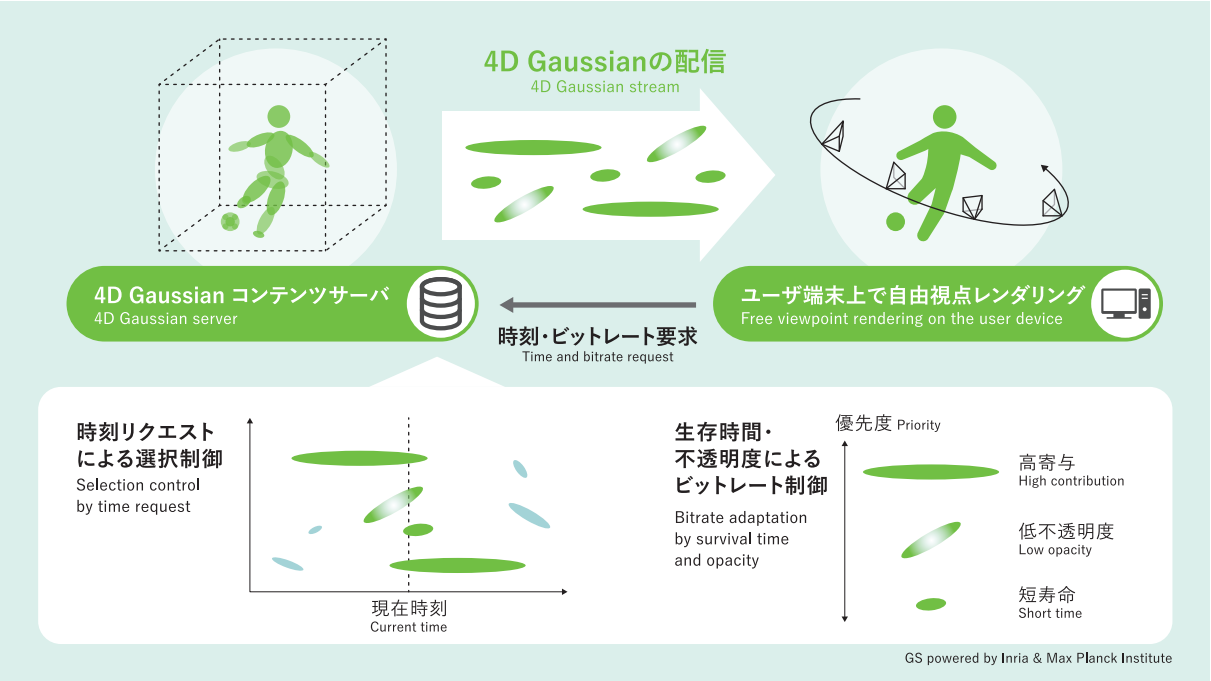
#Customer Experience#Digital & AI Transformation#Operational Efficiency

4DGS Free-Viewpoint Video Streaming

Delivering immersion via efficient free-viewpoint video streaming

Technical Challenges & Goals

Demand is growing for immersive free-viewpoint video in sports and entertainment. Conventional systems require large data volumes, limiting viewing on constrained networks and devices. Our technology selects only the data needed to meet user requirements, reducing traffic while maintaining high-quality viewing.



Key Technologies

Core Technologies

- Storing 4DGS data on the server and streaming only Gaussians needed for the requested viewing time
- Prioritizing 4D Gaussians by lifetime and opacity to control bitrate based on quality requirements

Key Differentiators

- Conventional Gaussian streaming is frame-based. Ours streams by Gaussian, achieving ~4x higher FPS
- Current technology lacks adaptive bitrate control. Ours cuts data up to 50% via lifetime and opacity

Use Cases

Entertainment

Live music and sports can be viewed from any angle or moment. Viewers can focus on preferred performers, players, or scenes for an interactive experience, while virtual camera views unavailable on site can also support video production.

Exhibitors

NTT Network Service Systems Laboratories

CONTACT：Network Architecture Project