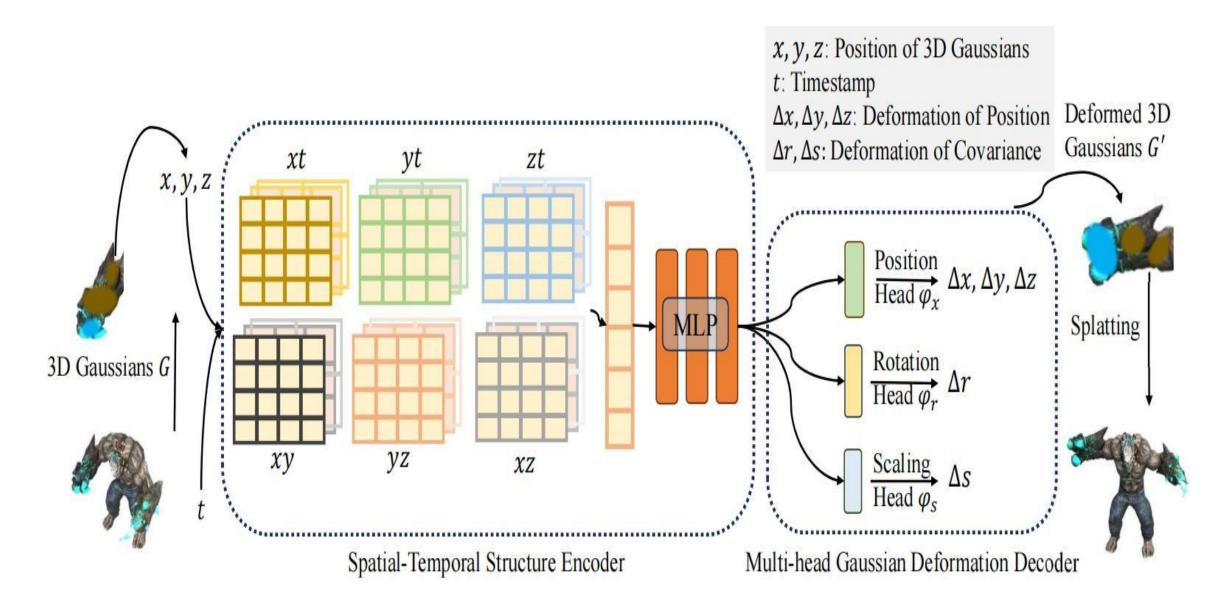
4D Gaussian Splatting - Time Dynamic Scene Rendering

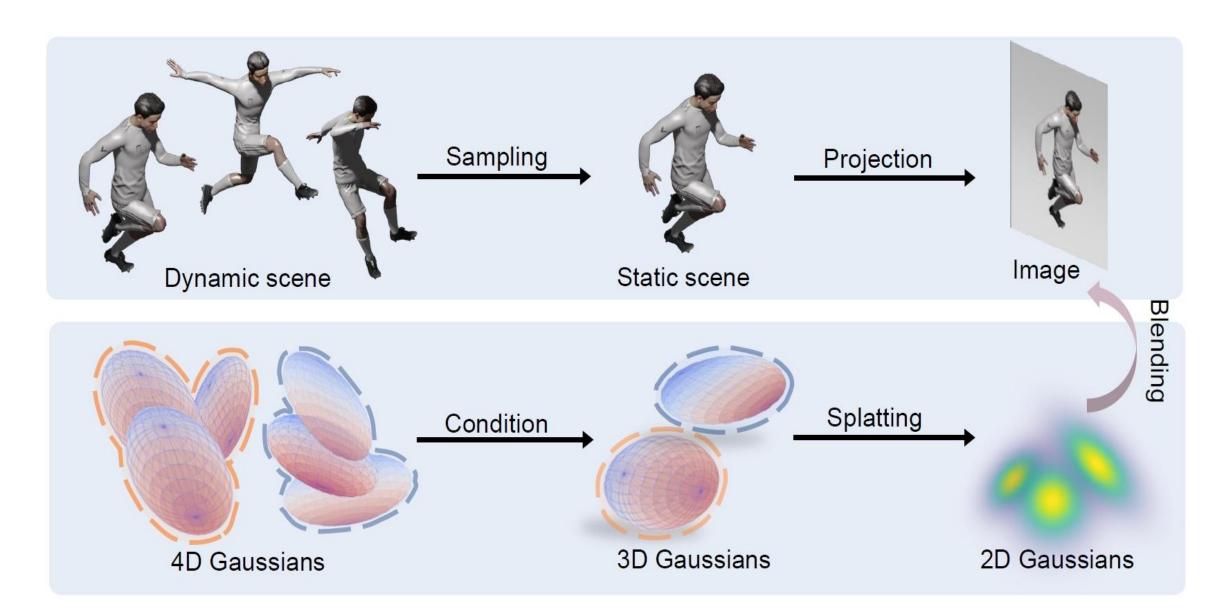
4D Gaussian Splatting

- □ 4D Gaussian Splatting (4D-GS) as a holistic representation for dynamic scenes rather than applying 3D-GS for each individual frame.
- ☐ In 4D-GS, a novel explicit representation containing both 3D Gaussians and 4D neural voxels is proposed.
- A decomposed neural voxel encoding algorithm inspired by HexPlane is proposed to efficiently build Gaussian features from 4D neural voxels and then a lightweight MLP is applied to predict Gaussian deformations at novel timestamps.

pipeline 4D Gaussian of model



Schematic illustration



Input 2D Image Dataset

Jumping jacks Image dataset:



Standup Image dataset:



Training Gaussian Model

Model Package:

4DGaussians Model Package

Training Platform:

Google Colab

Output Reconstructing Dynamic 3D Scenes

Jumping jacks 3D Scenes

Standup 3D Scenes



