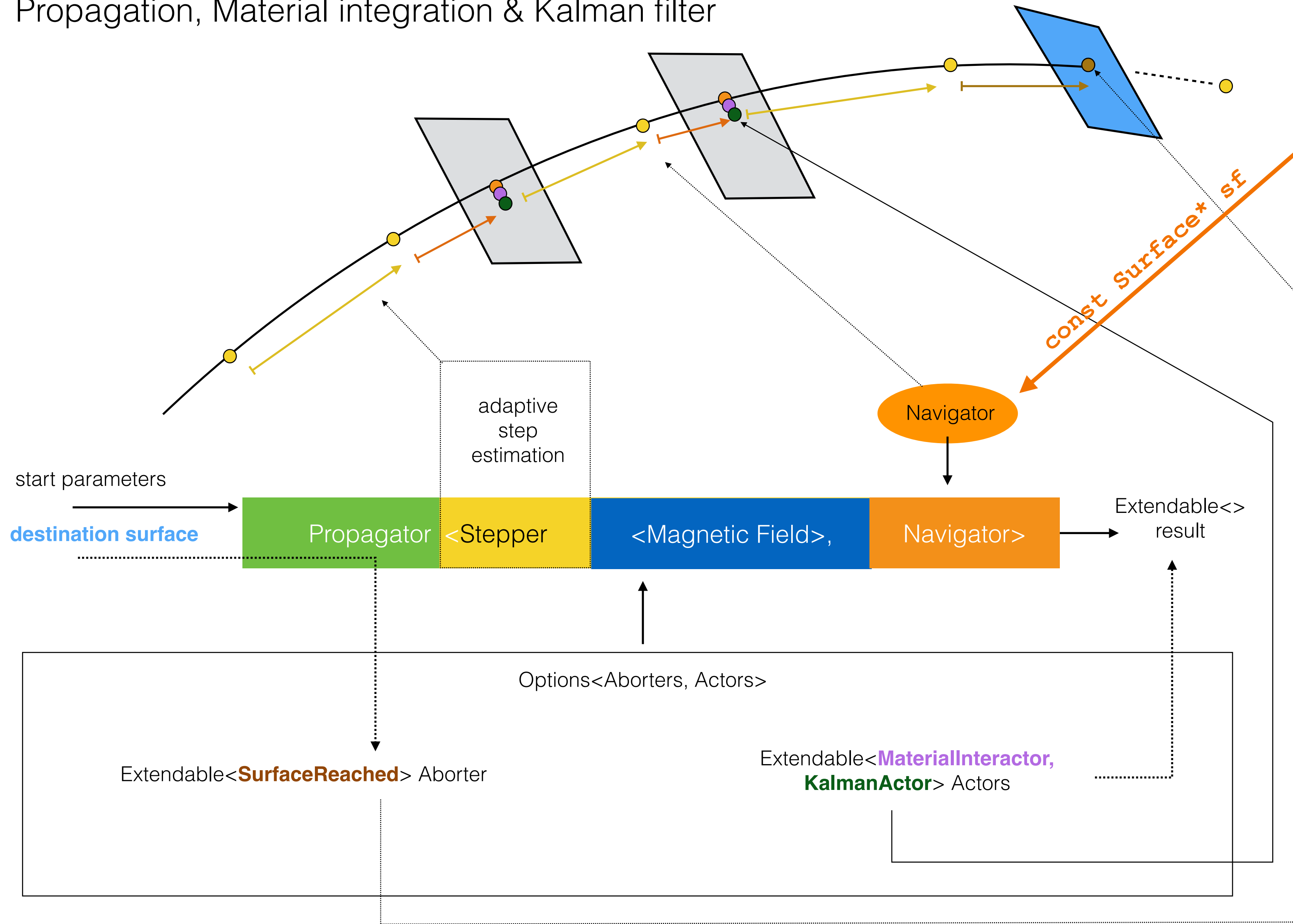


Geometry for GPU

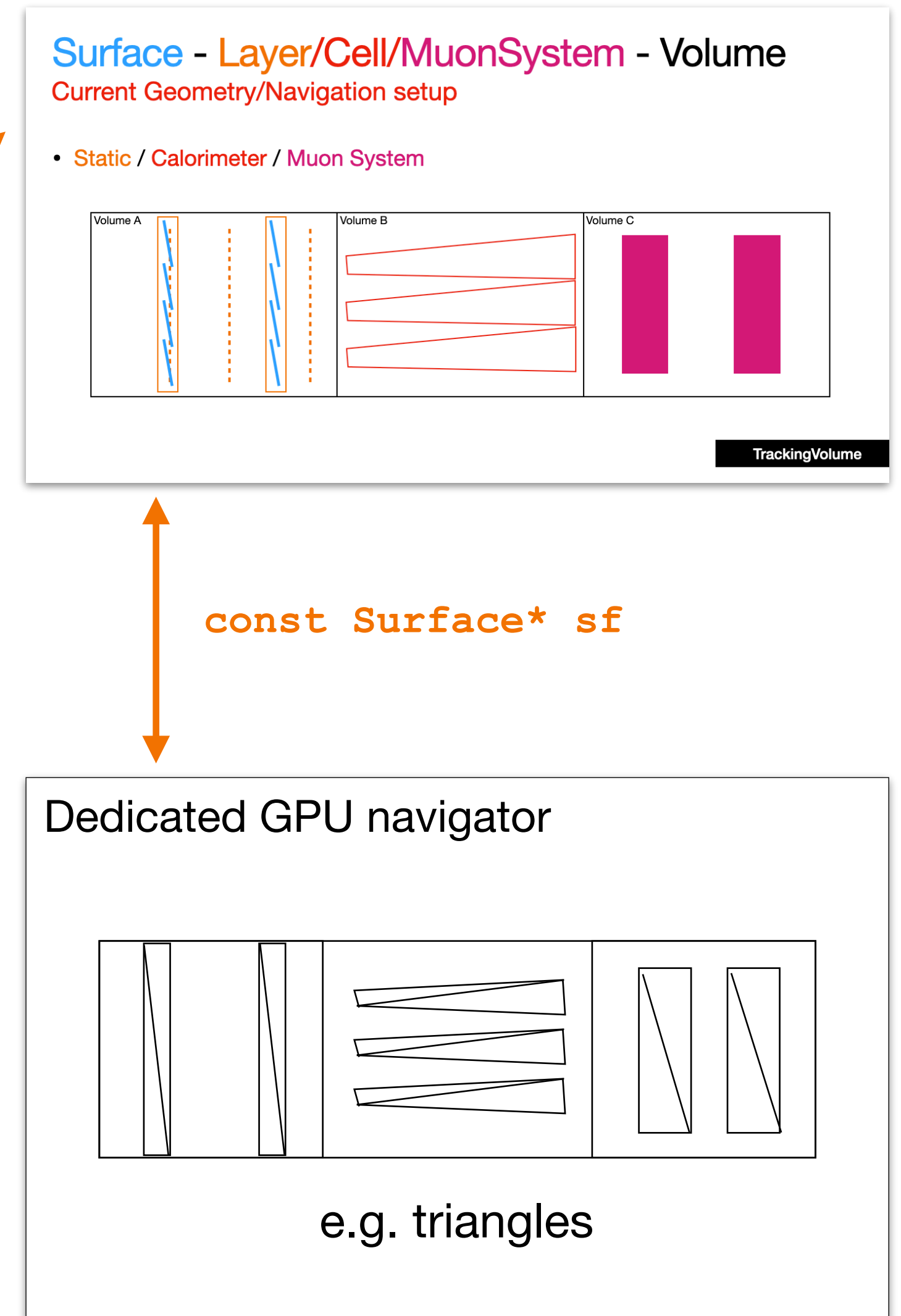
Input to ACTS Workshop / Developers discussion

A. Salzburger

Propagation, Material integration & Kalman filter



yesterday:

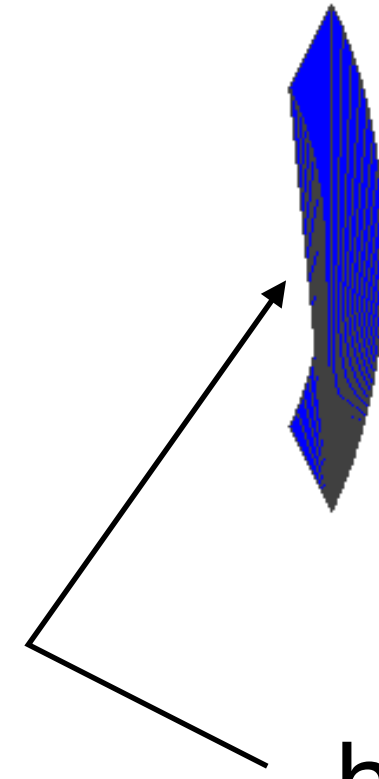
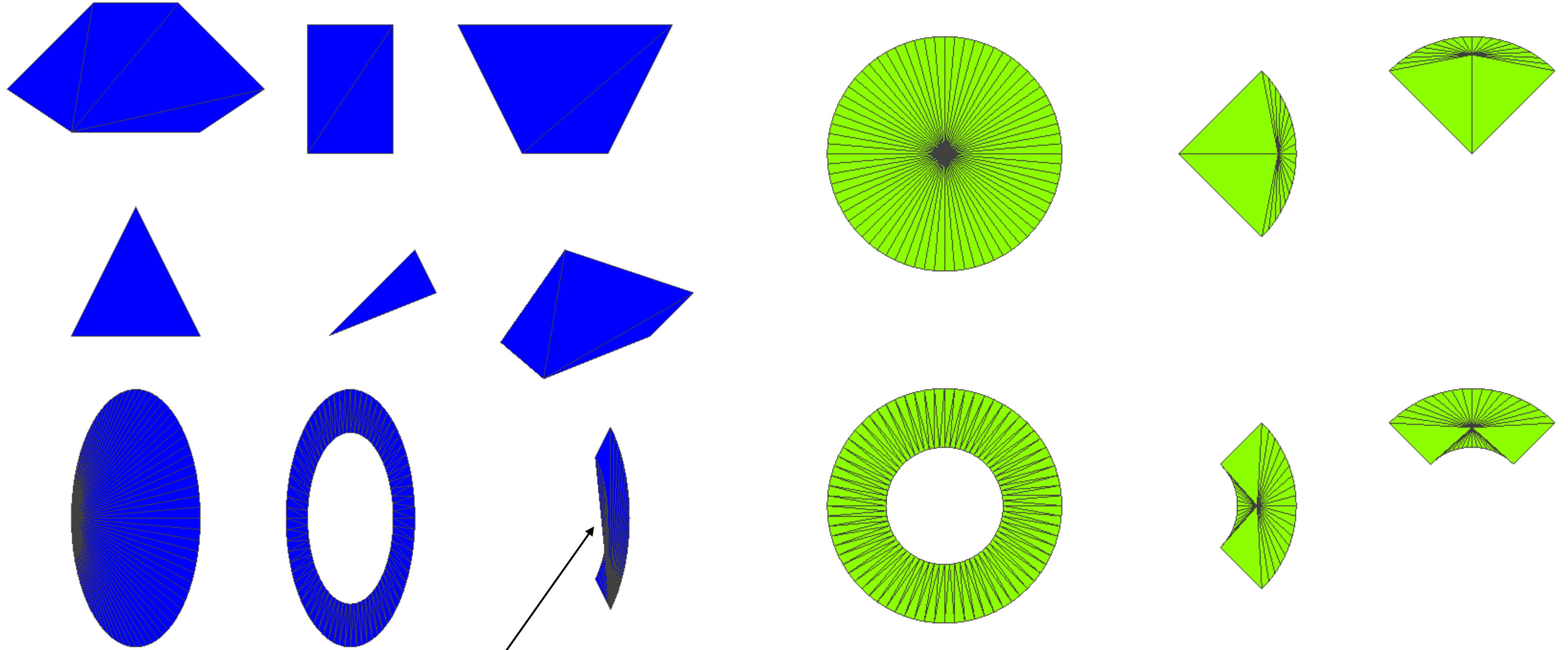


Polyhedron

Exists as mesh and triangular mesh

```
/// Default constructor from a vector of vertices and a vector of faces
/// @param verticesIn The 3D global vertices that make up the object
/// @param facesIn List of lists of indices for faces.
/// @param triangularMeshIn List of lists of indices for a triangular mesh
/// @param isExact A dedicated flag if this is exact or not
/// @note This creates copies of the input vectors
Polyhedron(const std::vector<Vector3D>& verticesIn,
           const std::vector<FaceType>& facesIn,
           const std::vector<FaceType>& triangularMeshIn, bool isExact = true)
: vertices(verticesIn),
  faces(facesIn),
  triangularMesh(triangularMeshIn),
  exact(isExact) {}
```

Triangulation



<https://github.com/acts-project/acts/issues/166>

Triangulation / volumes

Also TrackingGeometry could be established as a triangular mesh.

