TrackML Seattle Hackathon Dataset

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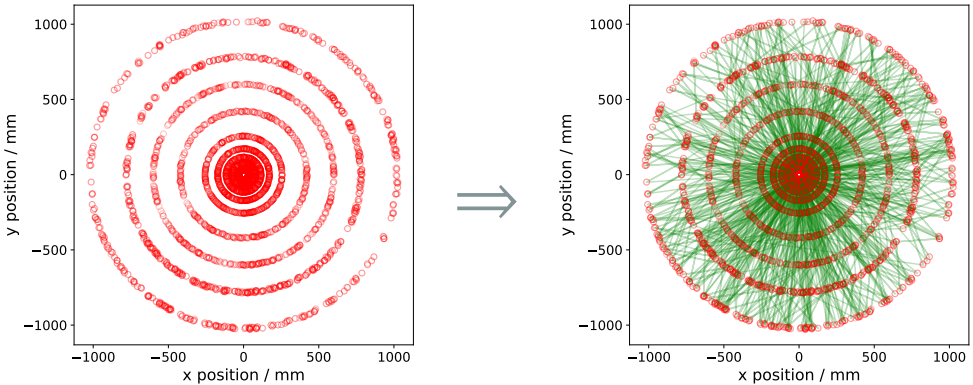
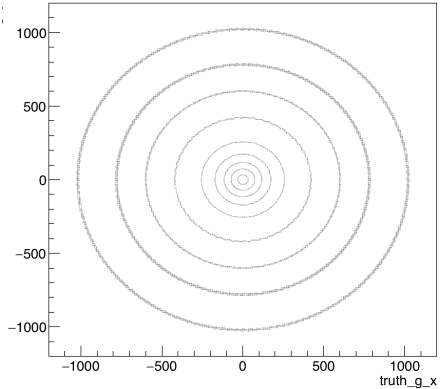
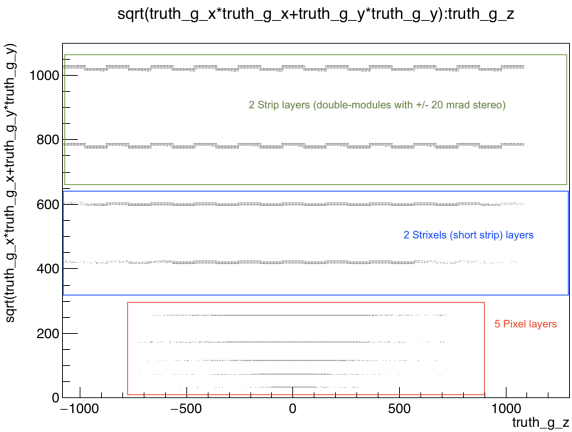
UNIVERSITÉ
DE GENÈVE

What we want you do to do



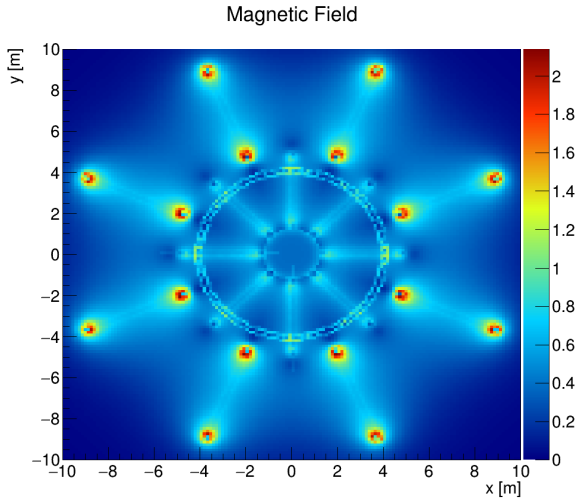
For what geometry we want you to do it



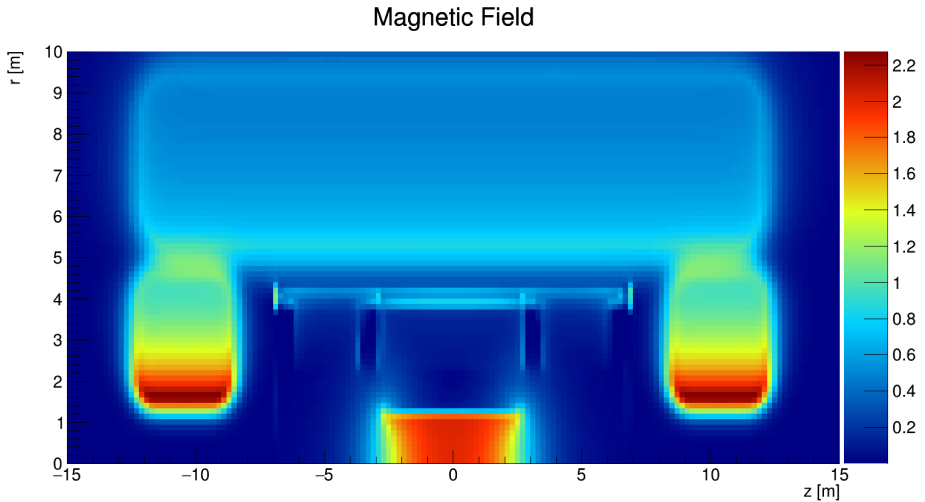


From A. Salzburger

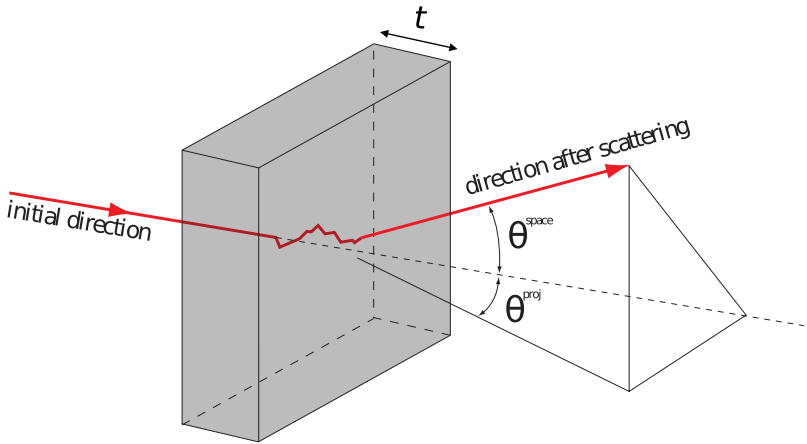
What we simulate — magnetic field



What we simulate — magnetic field

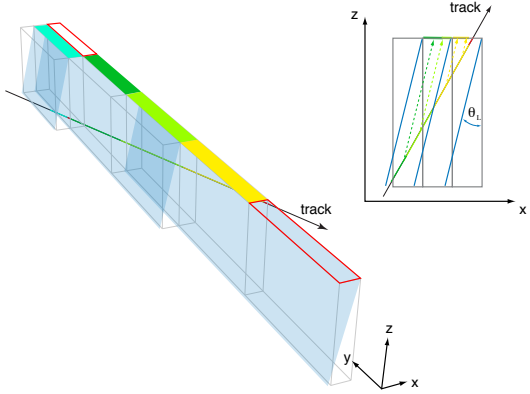


What we simulate — multiple scattering



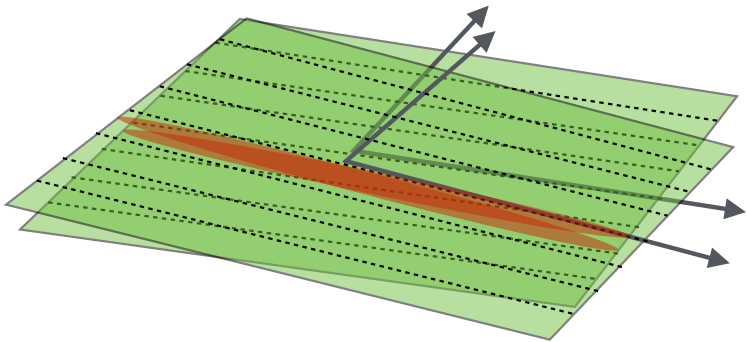
From A. Salzburger

What we simulate — geometric clustering



From A. Salzburger

What we simulate — stereo angle



From A. Salzburger

What we always give you

event...-hits.csv

```
hit_id, volume_id, layer_id, module_id,      x,      y,      z
...
      2,         0,        0,         0, -812.8, -631.4,  411.5
      3,         0,        0,         0,  649.4, -785.7, -309.1
...
```

What we sometimes give you

event...-particles.csv

```
1       particle_id ,       vx ,     vy ,    vz ,      px ,     py ,     pz ,  q
2  ...
3  4503805785800704, -0.0083, 0.013, 0.30,  0.182, 0.064,  0.18,  1
4  4503943224754176, -0.0083, 0.013, 0.30, -0.051, 0.167, -0.12, -1
5  ...
```

event...-truth.csv

```
1  hit_id ,          particle_id ,     tx ,     ty      tz ,    tpx ,    tpy ,    tpz
2  ...
3       2,    4513289073590272, -813., -630.,  378., -0.74, -0.19,  0.27
4       3, 117094208786923520,  648., -786., -352.,  0.12, -0.63, -0.21
5  ...
```

What we expect you to give us

submission.csv

```
event_id, hit_id, track_id
...
       51,      2,       42
       51,      3,       23
...
```