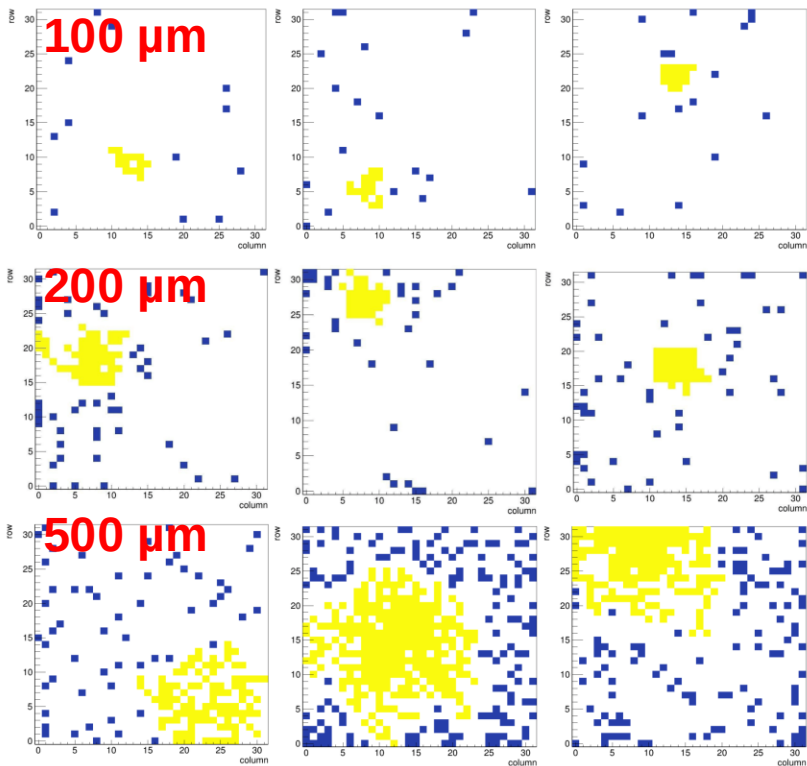


# dSiPM Update

## Thin-LYSO coupling

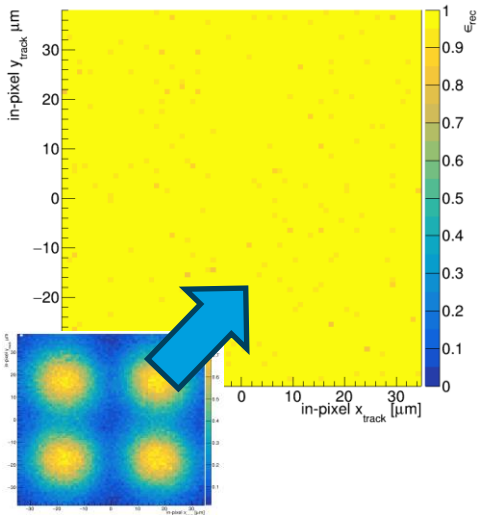
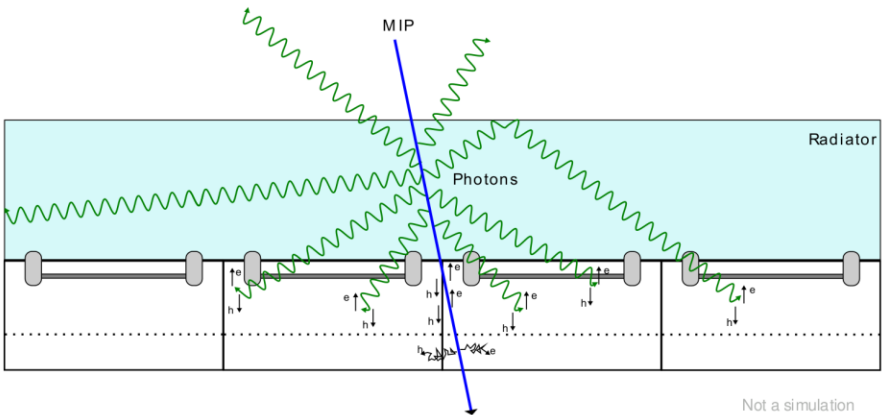


## DESY dSiPM 4D Performances

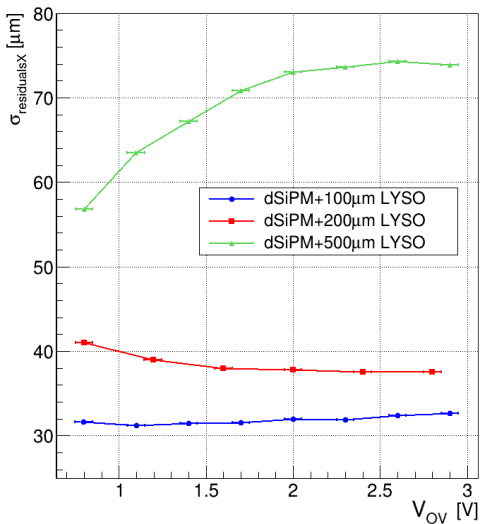
|                    | dSiPM   | DSiPM +LYSO |
|--------------------|---------|-------------|
| Cluster Size       | ~ 1     | 10 – 40     |
| Spatial Resolution | ~ 20 μm | ~ 35 μm     |
| Efficiency         | ~ 33 %  | > 99 %      |
| Noise Rate         | O(MHz)  | O(Hz)*      |
| Time Resolution    | ~ 50 ps | < 1ns **    |

\* Cutting on cluster-size  
\*\* Currently under investigation

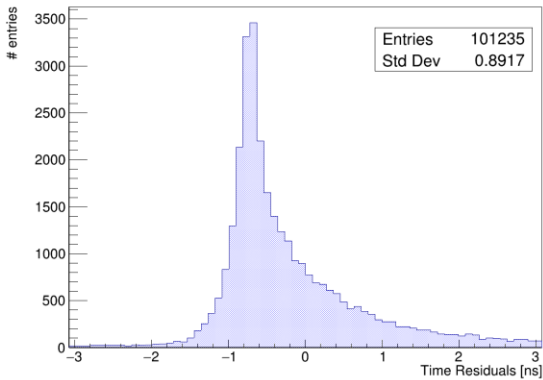
DSiPM + Thin LYSO concept



Efficiency Improvement



Spatial Resolution



Timing