

## **Phase 0**

### **Building detector layout**

#### **Calculating pixel location based values depending on layout**

Code flexible enough to work for a variety of detector types  
assumed to consist of a grid of modules with optional gaps allowed in between rows  
and columns.

#### **phase0\_LayoutExamples.R:**

Examples of detector layout

##### **INPUT**

Currently as part of R-code:

- Real world examples: Excalibur, Perkin-Elmer, Pilatus
- 4 (hypothetical) sample detector set ups

##### **OUTPUT**

- Layout object

#### **phase0\_LayoutVisualisation.R:**

Plot showing modules and gaps of detector layout

##### **INPUT:**

- Layout object

##### **OUTPUT**

- Plot visualising layout

#### **phase0\_LayoutPixel.R:**

Calculations of pixel specific layout information stored in matrices

##### **INPUT:**

- Layout object

##### **OUTPUT:**

- LayoutPixel object
- Plots visualising layout depending pixels functions