## **Neutron Imaging Detectors**

## The signal chain

Now let's do it backwards:

- This means the dynamic resolution of neutron imaging depends on the NEUTRON statistics, and NOT on the PHOTON statistics!
- It makes no sense to employ a super light collecting lens that transmits dozens of photons per neutron – and makes the camera overflow before the required neutron statistics is reached!
- BUT the lens should collect several photons per detected neutron so that the photon statistics does not influence the neutron statistics.

Slide courtesy: Dr. Burkhard Schillinger (FRM-II, Munich, Germany)