Highlights from Beam Diagnostics, H. SCHMICKLER, CERN, Geneva - The quality of beam diagnostics is very important in accelerators for the optimization of machine performance and for the under standing of accelerator physics issues. Many examples of successful and outstanding beam instrumentation at different accelerators will be shown, highlighting the following aspects:

- ultimate measurement resolution in space and time obtained exploiting different detection principles,
- signal treatments providing large dynamic ranges,
- benefit for beam instrumentation obtained from introducing digital signal treatment techniques.