

Technology of Cryogenics for Storage Rings,
H. LIERL, DESY - With the increase of superconducting accelerators in size and beam energies up to the TeV region the according refrigeration power needed went up considerably. It is not only the size of the cryoplants and of the cryogenic distribution and cooling systems which increased their complexity but it is also the demand for an uninterrupted and efficient operation together with the need for a flexible use of the system for cool down, warm up and steady state operation of very distinguished components which triggers the development of cryogenic technology and cryogenic components. Nevertheless there is a limited number of different cooling systems which were developed for large superconducting accelerators and which can be compared: the different principles used, the different helium properties utilized, the technologies employed, the different components needed and the different schemes realized. The most essential of these points will be worked out and described.