

THE OBJECT ORIENTED MODEL OF THE AD CYCLE AND ITS IMPLEMENTATION

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Central to the control and operation of the CERN Antiproton Decelerator (AD) is the deceleration cycle which involves accelerator sub-systems such as magnet current, timing, RF systems etc. It is fundamental to AD operation that these sub-system cycles are coherent and an integrated AD Cycle Editor has been proposed to guarantee this coherence. In the object oriented model of the AD, the highest level of abstraction is the object "AD Cycle" which is described in physical terms with an associated set of operations. The accelerator sub-systems inherit from this object thus guaranteeing coherence. The model is implemented in the AD Cycle Editor, which acts on the AD Cycle object and implicitly therefore also on the sub-systems. In this paper the model of the AD Cycle and sub-systems are discussed. The AD Cycle Editor is also presented with comments on the results of the commissioned system.