

**Study and Construction of a Trapped Ion Source,**  
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Di Bari - In this work we present the design and the  
construction of a Trapped Ion Source (TIS) that can be seen  
as a modified version of an EBIT and an EBIS. One can  
foresee that TIS could overcome some drawbacks of the  
EBIT and EBIS making it a more flexible device.  
Furthermore a detailed discussion on the electron beam  
transport with focusing quadrupoles of new design will be  
also shown.