

**Instability Studies of the PLS Storage Ring**\*,  
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The Pohang Light Source (PLS) is routinely operated  
for the beamline users at about 120 mA with over  
twelve hours of beam lifetime. Unstable beam  
conditions have been reported for certain operation  
setting and an attempt of a systematic study for the  
beam instabilities has been made. The coupled bunch  
instabilities, mostly induced by the higher order modes  
(HOMs) of the RF cavities and the ion trapping are the  
major subject in this campaign. Couple of methods to  
cure these unstable conditions have been applied and  
the fast feedback system is also being considered. The  
approaches and results of the measurements will be  
presented.

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