

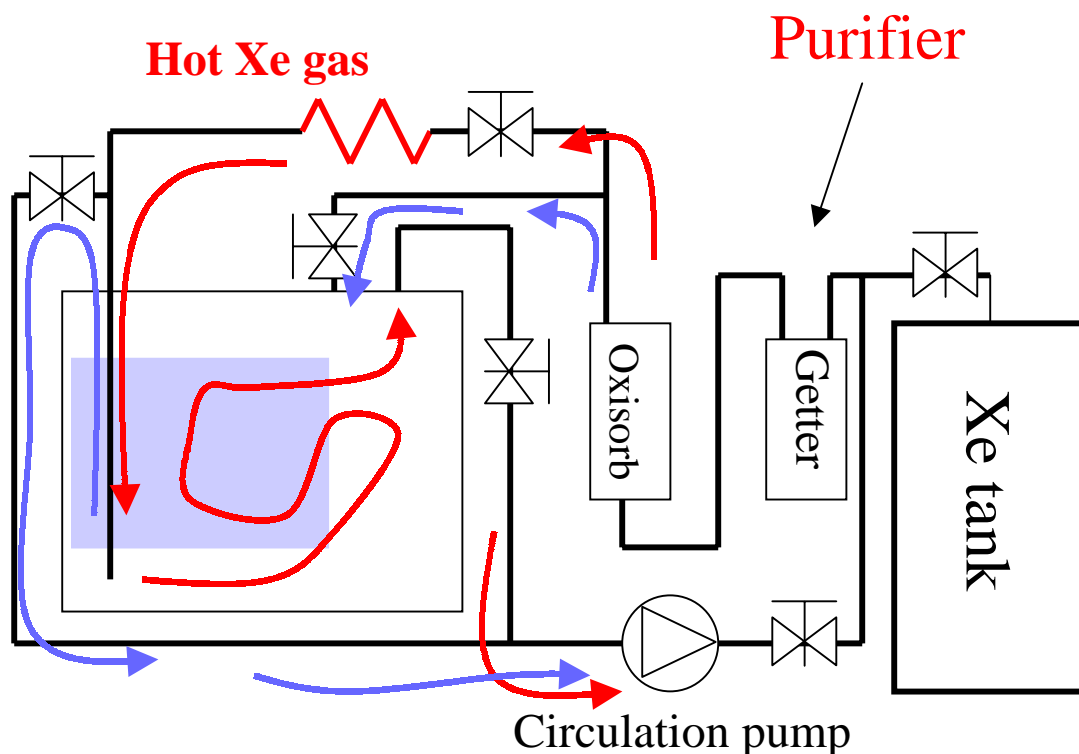
Report on the LP R&D

S.Mihara 31/May/02

- Circulation/Purification status
- Analysis of cosmic-ray and alpha data by Ryu
- Short-term plan from now

Circulation system

- Circulation system



- Two operation modes
 - Hot gas circulation
 - Circulation during detector operation
 - 10-12cc/minutes
- Purification was stopped 27/May to investigate water desorption rate intensity in the chamber.
- Getter and Oxisorbs are by-passed with keeping the circulation.

Summary and Short-term Plan from now

- 30cm absorption length achieved
- We stopped purification on 27/May
 - Light yield looks to be increasing, though the increasing rate is small than before
 - This is probably due to water capture by the liquid nitrogen cooling pipe.
 - This does not mean that the purifiers were not effective.
 - <- has to be studied later

Summary and Short-term plan cont'd

Short-term plan

- **Achieve at least 50 cm absorption length.**
 - **It will take 200 hours from now.**
- **After that, investigate what is essential to remove water, by stopping circulation/Liq N2 operation.**
- **Installation of a new pump to increase the flow rate. This work need to stop the circulation.**
- **Try achieving 100 cm absorption length and check how we can keep the uniformity during long-term operation.**