

# LSC NEWSLETTER

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## LSC & ICRR Agreement to Promote Hyper-Kamiokande

The LSC and ICRR, UTokyo signed an agreement to promote Hyper-Kamiokande on the basis of the MoU signed in August 2022. The agreement includes the list of in-kind contributions from LSC to ICRR, UTokyo such as the production of 20" PMT covers, the design of ventilation and geomagnetic systems and electronic components. ICRR Director Masayuki Nakahata and LSC Director Carlos Peña Garay exchanged signatures by post. These funds come from the European Recovery and Resilience Facility (RRF), which aims to make European economies and societies more sustainable, resilient and better prepared for the challenges and opportunities of the green and digital transitions.



## Open Day 2022

On Sunday, September 20, the LSC opened its doors to the public with an open day, with a programme full of activities in which over 300 people participated. In addition to visiting the underground facilities, there were talks, children's workshops, visits to our new museum and demonstrations of detection techniques.

## PMT covers on track

New PMT covers have been designed and built by the HyperKamiokande Spanish team. These covers have a much larger critical buckling pressure than previous models. More to come soon.



## New additions to the LSC

David Castella joined the LSC staff as a computer manager to work on Hyper-Kamiokande apps and Jose Luis Lopez as a mechanical technician to work on PMT covers.



## LSC Publications:

Improving ANAIS-112 sensitivity to DAMA/LIBRA signal with machine learning techniques

I. Coarasa, J. Apilluelo, J. Amaré, S. Cebrián, D. Cintas et al. (Sep 28, 2022) e-Print: 2209.14113 [astro-ph.IM]

Development of Ultra-pure Gadolinium Sulfate for the Super-Kamiokande Gadolinium Project

K. Hosokawa(Kamioka Observ.), M. Ikeda(Kamioka Observ.), T. Okada(Kamioka Observ.), H. Sekiya(Kamioka Observ. and U. Tokyo (main) and Tokyo U., IPMU), P. Fernandez(Madrid, Autonoma U.) et al. (Sep 13, 2022) e-Print: 2209.07273 [physics.ins-det]