LSST:UK Newsletter 40

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Introduction

Commissioning activities continue apace on Cerro Pachón. The latest <u>Rubin news digest post</u> highlights the recent move (right) of the M1/M3 mirror cell, containing a surrogate mass, from the Telescope Mount Assembly in the dome down five floors to the maintenance and integration hall, where the mirror cell is soon to be involved in the final testing of the mirror coating plant.



Credit: RubinObs/NSF/AURA

Meanwhile, there was a strong Rubin presence at the <u>243rd AAS meeting</u> in New Orleans. Slides are available from presentations at the <u>Rubin Town Hall</u> meeting, and a session on plans for <u>Early Science with Rubin</u>, with the latter covering the updated version of Rubin document <u>RTN-011</u> mentioned in <u>Stephen Smartt</u>'s <u>schedule update</u> in the November Newsletter. >>>

Closer to home, this is the first Newsletter edited by our Communications Officer, <u>Eleanor</u> <u>O'Kane</u>. Since starting her one-day-a-week post in September, Eleanor has mainly been working on a communications strategy for LSST:UK – which, as noted by <u>Mike Watson below</u>, was discussed by the Consortium Board at its recent meeting – but she is also taking over more practical comms tasks, such as the Newsletter. Eleanor will introduce more of her plans in future Newsletters, but you will already be able to see the influence of her graphic design skills in the improved layout of this one!

Please note that this Newsletter contains three deadlines:

- 15 February: stage-one proposals for the <u>next round of LINCC Framework Incubators</u>
- 29 February: <u>community input to the LSST:UK Equality</u>, <u>Diversity and Inclusion plan</u>
- 29 February: (self-)nominations for membership of the Rubin Users Committee

Those with ideas for future Newsletter items should contact the LSST:UK Communications Officer, <u>Eleanor O'Kane</u> (eokane@roe.ac.uk), while everyone is encouraged to subscribe to the <u>Rubin Observatory Digest</u> for more general news from the US observatory team.

Bob Mann

Community input sought for the LSST:UK Equality, Diversity and Inclusion plan

As part of the Phase C grant award, STFC Science Board required us to produce three project plans. The first two, on community and industry engagement, are relatively straightforward, and mature drafts were submitted for comment to our STFC Oversight Committee in December, but the third, on Equality, Diversity and Inclusion (EDI), requires more thought.

The LSST:UK Consortium is particularly well placed to influence the adoption of good EDI practices within the UK astronomical community, for three reasons:

- firstly, the inclusion of all UK astronomy groups in the Consortium provides it with an unusually broad reach into the UK astronomical community;
- secondly, the longevity of the Consortium, which will have been in existence for more than two decades by the time the LSST survey ends, means that its practices and norms can influence a generation of UK astronomers; and
- thirdly, and most importantly for this plan, Diversity, Equality, and Inclusion (DEI: the more common acronym in the US) issues are being taken very seriously within the Rubin Observatory, and, by extension, the wider LSST community, so LSST:UK will not be acting in isolation, but will have a range of policies and practices with which to align its own activities.

With this opportunity comes the responsibility to do this important job well. As mentioned in previous Newsletters, LSST:UK is soon to change from a consortium of institutions to >>>

a consortium of individuals, and we want our EDI plan to inform strongly the rights and responsibilities of consortium membership, to set us up well as the start of survey operations approaches. So, we will take our time to produce our plan, ensuring both that we remain aligned with the DEI initiatives being developed within the wider LSST community and that we benefit fully from community input to help shape our plans. Opportunities to provide input on draft plans will be advertised in future Newsletters, and we are initiating the collection of community input with a survey now.

This survey is in the form of a <u>webform</u>, which will remain open until **23.59 GMT on Thursday**, **29 February 2024**. It suggests some headings under which members of the community may want to provide input, but also solicits comments on any relevant topic; at this stage, we are keen to gather as wide a range of inputs as we can, so feel free to tell us whatever you think we should consider as we start developing this plan. The form can be completed anonymously, or you can leave your name and email address, if you are happy for us to follow up on your comments.

Please take a little time to provide us with your thoughts through this <u>webform</u>, as doing so will help shape how our Consortium operates over the coming decade.

Bob Mann

Rubin Users Committee – nominations open

Rubin Observatory seeks members of the science community to serve on the <u>Rubin Users</u> <u>Committee 2</u> (UC). Please note that **self-nominations are encouraged. The deadline for nominations is 29 February 2024**.

The Rubin Users Committee has been in place since early 2022. It is the formal interface for feedback from the science community regarding the quality and efficacy of the Rubin data products and services (e.g. the Rubin Science Platform). The first group of Users Committee members will come to the end of their terms shortly, therefore new members are being sought.

A full description of the Rubin Users Committee, including its role, responsibilities, and the membership criteria, can be found in the <u>Charge to the Users Committee (RDO-051) 4</u>. More details can also be found in <u>the original call for nominations in 2021 1</u>. A list of the current UC members can be found on the <u>Rubin Users Committee website 2</u>.

Once complete, email your form to <u>Michael Strauss</u> (strauss@astro.princeton.edu), chair of the Rubin Observatory Science Advisory Council (SAC) **by 29 February 2024**. The SAC will review the nominations and make a recommendation to the Rubin Observatory Operations Director, who will make the final decisions. The contents of these forms will be seen only by the Rubin SAC members and the Operations Director. >>>

If you would like to self-nominate, please create the nomination form as a document (preferably a PDF) with the following components:

- Nominee name.
- Nominee email.
- Nominee institutional affiliation.
- Nominator. If not a self-nomination, indicate if the nominee is aware of the nomination.
- Career stage that best describes the nominee for the next two years (e.g., graduate student; postdoctoral researcher; research staff scientists / engineer; junior / senior / emeritus professor).
- Science Collaborations (if any) the nominee is a member of.
- Nominee's Rubin-related science interests (up to one paragraph).
- Nominee's experience with the Rubin Science Platform, LSST Science Pipelines; other relevant experience with the Rubin Observatory data products and services such as Data Preview 0 or Stack Club; or technical experience with relevant precursor surveys such as, e.g., HSC, KIDS, or DES (up to one page).

Eleanor O'Kane

Summary of LSST:UK Consortium Board meeting – 16 January 2024

The LSST:UK Consortium Board held its 16th meeting on 16 January 2024. The meeting was well attended by Board members, together with senior members of the project. A wide range of topics were discussed; below some points are highlighted which may be of interest:

Data Release Processing (Mike Watson): the UK is making a significant contribution to Rubin Data Release Processing (DRP) as part of its in-kind contribution to the project. At the time of the Phase C proposal to STFC, the precise requirements for DRP were not known, but now these have been clarified, LSST:UK issued an open call for proposals for five key DRP roles (at 0.5 or 1.0 FTE/yr) late last year. Bids were received from five institutions (some of them for multiple roles) and a selection panel was set up to recommend the allocations to the Board. The panel's recommendations were endorsed at the Board meeting and the candidates chosen will assume their roles in April 2024. The successful bids came from Sheffield, Edinburgh, RAL and Lancaster.

Project Leader's Report (Bob Mann**)**: the Board were given updates on the negotiations being undertaken by STFC and the US Department of Energy over the terms of the UK's Data Rights Agreement and on progress with the development of three project plans that were requested by STFC at the time of the Phase C grant award. Drafts of all three plans – on Equality, Diversity and Inclusion (EDI), plus engagement with industry and the community – were shared recently with our STFC Oversight Committee, who had few comments on the industry and community engagement plans, but who recommended that the EDI plan would benefit from a rethink. >>>

The Board had a wide-ranging discussion of this topic which provided many ideas to incorporate in the new plan, including soliciting community input at this stage, as discussed <u>above</u>.

Re-appointment of the Project Scientist and Project Leader (Mike Watson): at the last review of these senior positions in early 2022, the Board reappointed the Project Scientist (PS; Stephen Smartt) until April 2024 and the Project Leader (PL; Bob Mann) until April 2025, with these posts being the subject of an open call to the community when the terms of office elapsed. The Board reaffirmed that an open call was the right approach (although the incumbents will be very welcome to apply). The open call for the PS will be organised in the near future.

The Board also had presentations on a variety of topics which were mostly for information of members. <u>Eleanor O'Kane</u>, appointed as Communications Officer last September, presented an overview of the Communications Strategy for LSST:UK, while <u>Stephen Smartt</u> provided an update on the Rubin project status and an overview of the project schedule. <u>View Stephen's presentation</u>.

<u>Graham Smith</u> gave a detailed talk on the status and plans for Rubin commissioning, highlighting the role that members of the UK community are playing, and <u>Daniel Philip</u> <u>Weatherill</u> gave a fascinating insight into what it was like to actually work at the Observatory site at Cerro Pachón. The meeting ended with the Project Assurance Review by <u>Terry Sloan</u> which demonstrated that UK activities are on track, apart from a few areas where Rubin delays have impacted our activities, and a fascinating presentation from <u>James Mullaney</u> who gave us an idea of what it would be like to actually work with Rubin data in his preview of Rubin Science Platform demo sessions.

Mike Watson

LINCC Frameworks Incubator – call for Cohort 4

The LINCC Frameworks team at LSST Discovery Alliance (LSST-DA), Carnegie Mellon University (CMU), and University of Washington (UW) is inviting scientists to participate in the fourth cohorts of the LINCC Frameworks Incubator Program.

The <u>Incubator Program</u> was founded to engage the scientific community in the creation of software tools that support the community's analysis of Rubin LSST data. Research teams will be supported to test, apply, or expand early-stage analysis software being developed as a part of LINCC Frameworks using their own scientific investigations with existing surveys or simulated data. Selected Incubator teams will be invited (but not required) to send a team leader to CMU or UW for an extended period of up to three months.

In addition to involving the research community in the creation of valuable analysis tools for survey science, the LINCC Frameworks Incubators are expected to lead to cutting-edge scientific publications and position Incubator participants for success in their future funding and observing proposals. UK researchers have been very successful in this programme so far: <u>Meg</u> <u>Schwamb</u> and <u>Tom J Wilson</u> have received two of the four awards made to date. >>>

The deadline for applications for Cohort 4 is 15 February 2024. The Incubator teams will be announced approximately two months after the application deadline of 15 February 2024. It is anticipated that the Cohort 4 incubators will take place from June to August 2024.

- Get an overview of the programme, including <u>funding details</u>, <u>recommended</u> <u>experience</u>, <u>Incubator session details</u>, <u>project team composition and expected</u> <u>outcomes</u>.
- Watch a recording of the original LINCC Frameworks Incubators presentation
- Read about past participants, including Meg Schwamb and Tom J Wilson

Eleanor O'Kane

Latest Rubin science release: Intracluster light

The <u>third science release</u> from the Rubin Observatory focuses on how the Legacy Survey of Space and Time (LSST) will be the first astronomical survey to provide scientists with the data needed to detect intracluster light.

Found in galaxy clusters, the largest objects in the universe that are held together by their own gravity, intracluster light is extremely faint. It is difficult to detect by most telescopes and cameras. The data provided by LSST will offer new insights into the history of galaxy clusters.



Forthcoming meetings of interest

Since the previous newsletter, a number of further meetings have been announced, plus we have more details for others.

Dates	Meeting Title / Event	Meeting Website/ Contact	Meeting venue/ location
22/Jul/24— 26/Jul/24	Rubin Community Workshop	Further details about the meeting will be available once the meeting website is set up and registration opens. In the meantime, if you have questions about the meeting please send an email to pmo.rubin@noirlab.edu.	SLAC, California (hybrid)
08/Jul/24— 12/Jul/24	DESC Collaboration Meeting	https://lsstdesc.org/	ETZ Zurich, Switzerland
20/May/24— 23/May/24	Rare Gems in Big Data. The discovery potential of large astrophysical surveys: science opportunities, tools, and techniques	<u>https://mailchi.mp/d8d4daa3ed0a/first-announcement-rare-gems-in-big-data?e=5176cbbd93</u>	Tucson, AZ, USA
15/Apr/24— 19/Apr/24	KAVLI-IAU (IAUS 387) Symposium, "(Toward) Discovery of Life Beyond Earth and its Impact,"	<u>https://kavli-iau-</u> 2024.durham.ac.uk/wordpress/	Durham University, UK
18/Mar/24— 20/Mar/24	Rubin ToO 2024: Envisioning the Vera C. Rubin Observatory LSST Target of Opportunity program	https://lssttooworkshop.github.io/	Berkeley, California (or virtual)

12/Mar/24— 15/Mar/24	Preparing for the Statistical Age of Strong Gravitational Lens Science with the Rubin Observatory Legacy Survey of Space and Time (LSST)	https://sites.google.com/view/rubinslens24/	Oxford, UK
26/Feb/24— 01/Mar/24	DESC Collaboration Meeting	https://lsstdesc.org/	Virtual

Members of the Consortium (not in receipt of travel funding through one of the Science Centre grants) may apply for travel support for meetings of this kind via the LSST:UK Pool Travel Fund. Details are available at <u>Forthcoming LSST-related Meetings</u>

Note that the current list of forthcoming meeting is always available on the <u>Relevant</u> <u>Meetings</u> page. You may also wish to check information held on the LSST organisation website <u>LSST-organised events</u> and the <u>LSST Corporation website</u>.

News in brief

US Ambassador to Chile visits Rubin Observatory

In December 2023, the Rubin Observatory received a visit from Bernadette Meehan, the US Ambassador to Chile as part of a trip celebrating 200 years of official relations between Chile and the US. <u>Read more...</u>

Vera C. Rubin featured in New Scientist

New Scientist's latest online article on Rubin, published late December 2023, highlights some of the work taking place this year at Cerro Pachón <u>Read more...(Paywall)</u>

Announcements

Subir Sarkar has asked us to advertise the workshop <u>Challenging the Standard Cosmological</u> <u>Model</u>, which is due to be held at the Royal Society in London, on 15 and 16 April 2024. Registration is open now.

If you have significant announcements that are directly relevant to LSST:UK and would like to share the announcement in a future newsletter, please contact <u>Eleanor O'Kane</u> (email <u>eokane@roe.ac.uk</u>)

And finally, from the Vera C. Rubin Observatory gallery



LSST camera and SLAC camera team photographed in the LSST clean room, 16 January 2024. Credit: Jacqueline Ramseyer Orrell/SLAC National Accelerator Laboratory