

IndIGO to LIGO India Scientific Collaboration (LISC)

Indian Initiative in Gravitational-wave Observations

LIGO India Scientific Collaboration



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G1900021

<https://dcc.ligo.org/LIGO-M1900002>

MMA in the Era of LIGO-India,
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IndIGO to LISC

- Pan Indian participation in LSC has been conducted through the IndIGO group since 2012.
- Includes activities related to the LIGO-India Observatory (LIO) and participation in the various sub-groups of the LSC.
- Currently there are 14 IndIGO subgroups: **IPR, RRCAT, IUCAA, DCSCEM**, ICTS-TIFR, TIFR, CMI, IIT-Gn, IISER-Pune, IISER-Kolkata, IIT-Bombay, IIT-Hyd, IIT-Madras, IAR. 91 LSC members. FTE ~ 65
- Post LIGO-India project approval, a formal Government of India (GoI) recognised management structure exists to **oversee LIGO-India project** and **coordinate the related GW research**: **LIGO-India Project Management Board (LI-PMB)** & **LIGO-India Science Management Board (LI-SMB)**

IndIGO to LISC – Why/How

- To bring together formally LSC related GW research in Indian Institutions with the LIGO-India project, provide mechanisms for researchers outside IUCAA, IPR and RRCAT to contribute to specific LIGO India deliverables and set up as needed Working Groups in Science Board with technical expertise related to GW, **the IndIGO group in the LSC is restructured as the LISC.**
- This transition is formally initiated by a LI-SMB memorandum constituting the Executive Committee of LISC by Chair, LI-SMB. *Bala Iyer, Archana Pai, Anil Prabhakar and Sukanta Bose are its members*
- The Executive Committee will broadly serve the role for LISC that the Management Team does for the LSC
- Above Memo details its responsibilities [M1900002-v4](#)

LISC Management

- LISC will be managed by a PI who will be assisted by a co-PI. Their term will be for two years. The LISC council will elect the PI and co-PI.
- The LISC subgroup at any institution will be coordinated by Senior members, one for each LSC group category
- All Policy decisions of LISC will be made by an LISC council.
- LISC Council comprises all Senior members from IndIGO subgroups at different institutions. Currently strength is 20.
- The Executive Committee of LISC will function like the Management Team of LSC.
- LISC Policy will **not** be in conflict with LSC Policy.

Annual MoU

- Annual MoU of Pan-Indian LIGO-related activities will have two parts:
 - (a) LIGO-India Observatory (responsible for LIGO-India construction, Operations, Training) that will NOT be reviewed by the LSC MoU process but provided for information. R&D, EPO will be reviewed by usual LSC review process as in (b) below.
 - (b) LIGO-India-Scientific- Collaboration to be reviewed by usual LSC review process.
- Annual MoU with LSC will be organized indicating separately contributions from individual LISC institutions.
- Each LISC group will be responsible for their annual LSC membership Fees.
- In all other ways the LISC group and individual members will follow the rules of the LSC

New Groups

- Groups interested in joining LISC will contact the LISC PI to develop a plan based on the Program Document and White Papers keeping the LSC co-chairs informed.
- Their admission will be by vote of the LISC council.
- Subsequently, New groups and Senior members will make a presentation to LSC council for information but the LSC Council would **NOT** vote on it.
- (MORE DETAILS IN EXTRA SLIDES)

Institutions (14)	No. of Members (91) (51+40)	No of LISC Council members (21)	No of LSC Council members (12)
RRCAT	15	1	1
IPR	9	1	1
DCSCEM	5	0	0
IUCAA	33 (18+15)	5(2+3)	4 (2+2)
ICTS-TIFR	7	2	2
TIFR	5 (1+4)	2 (1+1)	1
CMI	3	1	1
IIT-Bombay	5	2	1
IIT-Madras	2 (1+1)	2(1+1)	1
IIT-Gn	3	1	0
IIT-Hyd	1	1	0
IISER-Pune	1	1	0
IISER-Kolkata	1	1	0
IAR	1	1	0

InfraOps
1277 hrs/wk
Total
1954 hrs/wk

Thanks to
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(LI SMB)
Archana Pai, Anil Prabhakar, Sukanta Bose
(LISC Executive Committee)
David Shoemaker, Dave Reitze
(LSC)

Thank you !!!

- (i) New Groups are admitted to the LISC through a vote of the LISC Council. They remain members of the LSC until they withdraw or are expelled.
- (ii) Members from New Groups in LISC shall provide a formal endorsement addressed to the LI-SMB chair from their respective institution head.
- (iii) Groups interested in joining the LISC will contact the LISC PI. They will develop a plan (based on the Program Document and White Papers) together with the PI, other members of the LISC for how the Group will contribute to the LISC keeping the LSC co-chairs informed.
- (iv) When the candidate Group's plan is complete, the PI will circulate it to the LISC Council as a motion to admit the Group for membership. The candidate Group will present its proposed collaborative program to the LISC Council. Approval requires a 2/3 majority of the ballots cast at the LISC vote on this motion.

- (v) Groups interested in joining LISC for contributions to LIGO-India Observatory (LIO) activities will contact coordinators at RRCAT, IPR, IUCAA or their designated representatives from PMB to develop their plans. After the group's plans are vetted and accepted, the Chair-SMB will convey its admission to the PI. The group will make a presentation to the LISC Council for information but there would be no vote on this.
- (vi) Subsequently, New groups and Senior members will make a presentation to the LSC council for information but the LSC Council would not vote on it.
- (vii) Graduate students, Post-docs, Project students (short and long term) can be added to existing groups by senior members in that group). The PI of LISC should be contacted by the senior member with cv of the new member, project to be involved in, FTE, discussions with group co-chairs. The Executive committee of LISC will deal with this.