భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

1. **<u>Title of the Project</u>** – Learning Disability Self-advocacy and Outreach: Enhancing greater inclusion, access to accommodations and equity in higher education institutes and corporate organizations

2. **<u>PI details with Dept and Designation</u>** – 1. **Dr. Shubha Ranganathan,** Associate Professor and Head, Department of Liberal Arts, IIT Hyderabad.

   2. **Mr. Chetan S. V**., Ph.D. Scholar in Psychology, Department of Liberal Arts, IIT Hyderabad

3. **<u>Origin /Background Problem</u>** – Learning Disability refers to a broad umbrella of significant

   difficulties in reading and spelling (Dyslexia), writing (Dysgraphia) and math (Dyscalculia). Research on Learning Disabilities in India has shown limited awareness on the concept among teachers, professors and corporate employees. Often, people with learning disabilities such as dyslexia, dysgraphia or dyscalculia face ableism, stigma and discrimination, guilt for availing accommodation, anxiety, depression and low self-esteem due to a lack of inclusive environment in the educational contexts. However, stories of how they navigate these challenges in everyday contexts, the quality of education they receive and the nuances of inclusiveness are less documented. Research suggests that people with dyslexia have creative abilities that are marginalized due to their disability status in many educational institutions and corporations in India. Recently, driven by activism and self-advocacy in the UK, LinkedIn has included "Dyslexic Thinking" as a skill and there has been an increased interest in recruiting neurodivergent talent in corporations across the globe. Hence, the narratives of young people with dyslexia provide insights on curricular aspects, teacher education and student assessments that can contribute to global citizenship education as indicated by SDG-4, Target 4.7. Similarly, insights on disability disclosure, focus on strengths, fair recruitment practices, and accommodations at workplaces aim to reduce inequalities, as indicated in SDG-10, Targets 10.2, 10.3 and 10.4, by contributing to general awareness, Diversity, Equity and Inclusion (DEI) practices, as well as policy level changes.

4. **<u>Aim and Objectives</u>** –
   i. To build a network of self-advocates of dyslexia to talk about their experiences through 2 online participatory workshops intended for the general public.
   ii. To create multimedia content such as short film or short video and publish narratives/ illustrated books to create awareness about learning disabilities in higher education institutes and corporate organizations.

5. **<u>Current Status of your work (including TRL)</u>** – Primary fieldwork involving online and face-to-face interviews with 28 young adults with learning disabilities and visits to 7 higher education institutes have been completed. 7 self-advocates who have consented for this project have adequate internet connection and technological skills to participate in the workshop.

6. **Proposed Work** – To organize 2 participatory workshops involving young adults with learning disabilities and to conduct 2 experiential workshops for college students, teachers and administrators Following this, preparing multimedia content (tentatively a short film/short documentary and/or an illustrated book) with the self-advocates and publishing them in accessible formats that can be freely available to everyone.

7. **Thematic areas covered under SDGs** *(Please mention SDGs separated by comma)* – SDG-4:Quality Education and SDG-10 Reduced Inequalities

8. BUDGET DETAILS (PLEASE DO NOT INCLUDE ANY OVERHEADS. OVERHEADS WILL BE ADDED AS PER INSTITUTE CSR NORMS. BIFURCATIONS WITHIN THE BUDGET MAY BE PROVIDED. HOWEVER, THIS CAN ALSO BE PROVIDED LATER. PLEASE INCLUDE THE YEAR WISE BUDGET WITH A MAX OF 3 YEARS.
   Duration-1 year: Overall budget: Rs. 8,70,000/- [1. Honorarium for self-advocates (Rs. 10,000/- each for 7 self-advocates- Rs. 70,000/-; 2. participatory and experiential workshop conduction (1 at a college and 1 at an organization) - Rs.2,00,000/-; 3. short film/short video production- Rs. 4,00,000/-; 4. illustrated book publication- Rs. 2,00,000/- (including illustrator charges)].

9. **Social Impact (*Qualitative and Quantitative*)** - The outcome of this project is to reframe narratives of

   learning disability that can potentially bridge gaps between the academia/corporate, lived experiences and public discourses through dialogues, creative content, awareness and advocacy.

भारतीय सांकेतिक विज्ञान संस्థ हैदराबाद्
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

1. **Title of the Project** – Spectrum Experiences: A Guide to an Experiential Workshop for Autism

2. **PI details with Dept and Designation** – 1. **Dr. Shubha Ranganathan,** Associate Professor and

    Head, Department of Liberal Arts, IIT Hyderabad 2. Dr. P. Bindhulakshmi, Associate Professor and Chairperson, Advanced center for Women's studies 3. Parul Kumtha, Trustee, Forum for Autism.

3. ORIGIN /BACKGROUND PROBLEM –

    In today's world there is increasing recognition that neurodiversity plays a significant role in educational and work contexts. As more and more companies are actively employing inclusive practices to recruit and support neurodivergent talent (Sarkar & Basu, 2023[1]), neurodiversity has now become a 'competitive advantage' (Austin & Pisano, 2017). Organizations are looking not just to recruit neurodivergent talent but also to develop neurodiversity programs that deliberate on the work-related accommodations, coaching support, and sensitivity training that are required for employees to thrive (Sahu, 2023[2]). At the same time, many educational institutions in India have enabling units, disability centers, and equal opportunity cells to cater to diverse learning needs and requirements.

    With the increasing numbers of diagnosed autistic persons, it is believed that the activities and outputs of this research can have direct positive impacts on autism advocacy, outreach, and neurodiversity inclusion in educational, corporate, and societal contexts.

4. AIM AND OBJECTIVES –

    a. To support autism outreach programs in colleges and higher educational institutions that would

    b. To enable wider awareness and sensitization about autism spectrum in the society (in neighborhoods and communities)

    [1] Sarkar, B. & Basu, S. (2023). India Inc opens its doors to neurodiverse employees. The Economic Times. https://economictimes.indiatimes.com/news/company/corporate-trends/india-inc-opens-its-doors-to-neurodiverse- employees/articleshow/99505306.cms

    [2] Sahu, A. (2023). How autistic talent grows in India Inc. https://www.moneycontrol.com/news/business/how-autistic-talent-grows-in-india-inc-10355241.html

    C. To strengthen organizations' (neuro)diversity and inclusion initiatives that would enable them to not only hire but also retain and support neurodivergent talent

5. CURRENT STATUS OF YOUR WORK (INCLUDING TRL) –

    We have prior experience of having conducted experiential workshops for autism awareness and acceptance in educational institutions. This group has put together a model for an experiential

workshop on autism spectrum. These workshops have seen great footfall and worked to improve sensitivity on campuses. Our community partners have been working in autism advocacy and services for decades and have strong networks with families and communities. Many have experience in establishing and setting up NGOs, schools, sheltered workshops, entrepreneurship ventures, etc. They are therefore well placed to conduct workshops and training. We seek to document this rich knowledge and database.

6. **Proposed Work** – We seek to produce the following: (a) an Illustrated Handbook, both in print and online versions, detailing the steps and process of carrying out an experiential workshop on autism spectrum and neurodiversity (b) a film, based on the handbook, that makes the content more accessible and engaging (c) training of resource persons who can support organization of workshops across the country

7. **Thematic areas covered under SDGs** *(Please mention SDGs separated by comma)* – SDG-4:

   Quality Education, SDG 8 – Decent work and economic growth, and SDG-10 Reduced Inequalities

8. **Budget Details (***Please do not include any overheads. Overheads will be added as per institute CSR norms. Bifurcations within the budget may be provided. However, this can also be provided later. Please include the year wise budget with a max of 3 years.*

Sr No.	Particulars	Amount (Rs.)
1	Human Resources	4,00,000
2	Film Making and Design	8,00,000
3	Printing & Distribution of the Handbook	2,00,000
4	Training of Resource Persons	3,00,000
	Total	17,00,000

Duration: 1 year

9. **Social Impact (***Qualitative and Quantitative***)** - The outcome of this project is to reframe narratives of autism and neurodiversity that can potentially bridge gaps between the academia/corporate, lived experiences and public discourses through dialogues, creative content, awareness and advocacy.

Indian Institute of Technology Hyderabad

1. **Title of the Project** – Nurturing Psychological Capital among Women in STEM Careers: Role of Coaching

2. PI details with Dept and Designation –Dr.M.P.Ganesh, Associate Professor, Department of Liberal Arts, IITH

3. Origin /Background Problem –

The increasing attrition of female students and women at different stages of the Science, Technology, Engineering, and Math (STEM) careers is a serious area of concern for administrators, policymakers, researchers and managers throughout the world (Loyalka et al., 2021). The causes for this trend of increasing gender gap across the stages of STEM education and career can be attributed to various psychosocial, cultural and institutional barriers. At a scientific career level, existing research has shown an apparent presence of "glass ceiling effect" for women and minorities in careers in STEM fields (Huang et al., 2020). Researchers have also noted that seriously higher levels of disparities exist between genders in STEM career in terms of their salary, rank, and tenure (Gonzalez Ramos, 2015). Since the policies about career re-entry are at the very nascent stage in India; it becomes tough for women to catch-up with the time they have lost due to career breaks. Many of these barriers are systemic and structural in nature and require larger macro interventions at various levels. At the same time the role of social and psychological capital cannot be denied in overcoming these factors (Machin-Rincon et al., 2020).

4. Aim and Objectives –
   a. To understand the career growth barriers among women in scientific careers.
   b. To understand the role of psychological interventions and coaching in overcoming those barriers among women in scientific careers.

5. Current Status of your work

I have been currently working on an action research project on understanding the role of mentoring and role models in reducing school dropout among girl students in rural government schools.

6. Proposed Work –

The sample consists of 50 women teachers and researchers belonging to science and engineering departments of Tier 2 and 3 universities and higher education institutions. The participants will undergo an initial two-day workshop on women leadership and career growth. This workshop will cover aspects like self-understanding, building personal capabilities, enhancing life and career skills, navigating through

organizational barriers etc. At the end of the workshop, the participants will be given an option to choose a life coach who can help them nurture their psychological capital. The participant and the coach can decide upon the specific areas to be addressed in the coaching sessions. The number of coaching sessions can range from 4 to 7. We plan to have the entire program to be spread across 100 days. A one day follow up workshop will be held during the end of the 100th day.

Thematic areas covered under SDGs –

Goal 5 (Gender Equality) and Goal 8 (Decent Work and Economic Growth)

7. BUDGET DETAILS

Sl No	Expense Head	Amount in INR
1	Two Day Workshop Expenses	1,50,000
2	Interview, data collection and analysis	50,000
3	Honorarium for coaches (25 coaches x Rs.20,000)	5,00,000
4	Research assistant for 4 months (Rs.30,000 per month)	1,20,000
5	Final one day workshop	50,000
6	Miscellaneous	25,000
	Total	8,95,000

8. **Social Impact (*Qualitative and Quantitative*)** –

1) The interventions like coaching and workshops will directly benefit the women professionals.

2) Once the effectiveness of the interventions is established through our study, we plan to publish the manuals on those programmes, so that they can be replicated by other trainers or organizations.

3) The findings of the surveys will act as a valuable source of input for organizations and governments for policy making in future.

4) The academic publications out of the data collected will add value to the existing literature in this area.

1. **Title of the Project**: **Child Sexual Health Education through Picture Books**: Designing and Disseminating Child-Friendly Low-Cost Multi-Language Picture Books on Sexual Health in Conversation with Children, Doctors, Teachers

2. **PI**: **Shuhita Bhattacharjee, Assistant Professor, Dept of Liberal Arts, and Adjunct Professor, Dept of Design** (Gender and Sexuality Studies, Critical Design Theory, Social Intervention Critical Theory, Literary and Cultural Studies)

<u>Co-PIs</u>:

Shubha Ranganathan HOD and Associate Professor, Dept of Liberal Arts (Medical Anthropology, Critical and Qualitative Psychology, Critical Disability Studies);   **Ankita Roy Assistant Professor, Dept of Design** (Communication Design, Book and Publication Design, UX-UI Design, , Data and Information Visualization, HCI/Interaction Design); **Chandan Bose** Assistant Professor, Dept of Liberal Arts (Visual Anthropology and Urban Ethnography)

Community Partners: **Rubaroo** (NGO Partner; Nodal Contact: Monisha); **Seya Collective**

(Community Partner; Nodal Contact: Meghana)

3. **Origin /Background Problem:** India has enacted landmark legislations for the protection of children (POCSO 2012, 2019). A 2007Ministry of Women and Child Development survey found that more than 53% of Indian children are subjected to sexual abuse, the majority being perpetrated by those in positions of trust/responsibility. Through pilot interventions "Human Rights and Gender Studies" has been introduced across a few CBSE schools and Telangana is attempting compulsory graduate gender education("Towards a World of Equals"). However, unlike West Bengal's high school "Lifestyle Education'' module, Telangana does not yet have in place a school module for comprehensive sexuality education. The project will collaborate with established community partners/NGOs (Rubaroo and Seya Collective) who have years of experience working in child sexuality education in Hyderabad. Sparse and useful initiatives have been undertaken by Menstrupedia and Talking About Reproductive and Sexual Health Issues (TARSHI)—that have designed illustrative texts and training programs to make rights-based information on sexual well-being for children, parents, and teachers. However, the field still lacks a child-friendly sexual health manual that communicates through a story told in pictures and in vernacular languages, and instructs through narratives about sexual consent/rights with an inclusion of diverse sexualities. This project will impart inclusive Comprehensive Sexuality Education (UNESCO 2018 guidelines)with information about responsible sexual behavior, the centrality of sexual consent/rights, the need for respect for all genders and body shapes, the acknowledgement of multiple templates of sexual desire and expressions (including persons with disabilities, the LGBTQIA+ community).

4. **Aim and Objectives:** Recognizing that school sexuality education has been identified as a crucial educational goal in national policies and protection from sexual abuse forms an integral part of primary health care, the project attempts to explore the gaps in child sexuality health education

through fieldwork in schools and hospitals/clinics (both public and private) in two districts of Hyderabad (across urban and peri-urban). Based on interviews with healthcare providers in these medical centers and questionnaire-based surveys with children in high-schools, a low cost and vernacular-accessible picture book will be designed for children to ensure their sexual and mental health. Filling gaps in existing secondary education and health mechanisms to stop sexual abuse, the project aims to produce a book that is child-friendly, comprehensive, inclusive, and rights-aware. It represents sexual health information in relation to all kinds of bodies—addressing situations of disabled persons, persons subjected to body shaming, persons falling under the LGBTQIA+ spectrum. The picture manual will then be re-administered to the same set of schoolchildren to gauge its impact and further the process of dissemination. The picture manual will also be distributed among doctors/paramedics and schoolteachers in the two districts through sensitization workshops. The project will end with the designing and publicization of a resource-rich informative website on child sexual health where resources, educational content, and the(multi-lingual)picture book will be made available for use by children and adults. A policy advisory manual will be submitted to the Government of Telangana, Ministry of Women Development and Child Welfare and the National Commission of Women

5. Current Status of your work (including TRL)

(a)   As preliminary research, a crucial project was undertaken under the creative supervision of the faculty design expert, Professor Ankita Roy, in 2022 to design a pop-up picture manual on sexual and reproductive health for young females after extensive fieldwork within the three-tiered primary healthcare system and Anganwadi workers of peri-urban Hyderabad (Kandi village)

(b)   A project directed at re-envisioning the approaches of Sex Education was carried out in 2008-2010 in Kolkata under the leadership through school workshops that aimed at evaluating the effectiveness of the West Bengal government endorsed sex education manual titled Lifestyle Education (*Jeevan Shaili*). Also, extensive research was done under the supervision of Professor Ankita Roy in West Bengal villages (2011) with the support of National Association for Reproductive and Child Health of India (NARCHI) to evaluate the sexual health of young children and older women and to design pictorial information material in local languages.

6. Proposed Work:

Duration of project: 18 months

Phase I: Interviewing teachers at schools and medical staff(doctors, paramedics, assisting staff)at Hyderabad hospitals/clinics to understand the existing levels of availability of sexual health information for children through these channels. Having identified the lacunae in their institutional mechanisms for arresting child sexual abuse and for ensuring children's sexual and mental health, the team will focus on visiting schools to conduct workshops (with audio-visual presentations) and administer qualitative questionnaires among schoolchildren. The teachers at these schools will be interviewed and will be included in focused group discussions to bring to light the most crucial areas of child ignorance, confusion, and misconceptions.

Phase II: Analyzing responses collected from schools and clinics/hospitals. Based on a narrative, sociological, and psychological analysis of the material, a low-cost vernacular-accessible picture book will be produced through a two-month intensive design workshop.

Phase III: Re-administering this newly designed material to the same set of schoolchildren. Simultaneously, a series of dissemination/sensitization workshops will be conducted with the teachers

and medical staff (gynecologists, pediatricians, and psychologists of hospitals/clinics) where this picture book will be distributed for wider circulation among parents and children.

Phase IV: Production of a website, articles, and government advisory manuals

7. **Thematic areas covered under SDGs:** Sustainable Development Goals 3 (Good Health and Well-Being), 4 (Quality Education), 5 (Gender Equality)

8. **Budget Details :** Rs.15,76,000 (Research Assistant salaries, Student Designer Assistant salaries, Cost of school workshops and hospital visits, ference material, hardware and software for designing the picture book, preliminary iterations and final publication of 500 copies of picture books, designing of a website)

9. **Social Impact (*Qualitative and Quantitative*):** The picture book will emphasize the idea of consent–so that the child audience is able to identify abuse better and is able to develop a rights-based understanding of adult relationships. The aim will be to undo regressive cultural messaging that suggests to the impressionable youth that 'love'/'romance' can justify sexual abuse/violence. The project will mainstream sexuality education as a part of school pedagogy and child sexual (and mental) health as a crucial area of primary healthcare by channeling the work through schools and hospitals/clinics. The work will also involve all stakeholders from educational and healthcare institutions under one umbrella: children, schools, teachers, medical professionals, paramedical staff, parents, community and NGO-partners, academic researchers. Understanding socio-cultural reasons that limit access to this information, the project will aim to remove the stigma surrounding discussions of sexual health and will make the picture book and other necessary resources freely available to children and adults through a website. The book will be low-cost and vernacular-accessible to ensure maximum reach and will be circulated in schools and clinics to ensure maximum outreach/impact. We will also be able to build a statistical database of existing levels of sexual health awareness among children, the percentage of authoritative sources of information available to them, the difference in levels and kinds of sexual health information between children in peri-urban and urban Hyderabad, public and private schools.

భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

1. **Title:** Establishing an advanced research-flavored robotic telescope for Outreach and Citizen Science program

2. **Objective**: We propose to establish an advanced 0.5-meter robotic telescope (ART) observatory with a fast CCD camera which will be the largest campus telescope facility among all IITs to be used for outreach and citizen science programs. The proposed observatory will serve multiple purposes: (1) it will be used for the research on planetary science, bright optically variable stars, stellar nebula, asteroids and comets: (2) it will be utilized as a teaching laboratory where students from schools and colleges will get a flavor of astronomical research and can be a part of projects.(3) The citizen science programs and outreach activities will be organized using such an observatory to engage students and citizens in collaboration with IASC and NASA (4) Based on a large volume of imaging and time-series data gathered over two years, potential interdisciplinary research on big data science with machine learning application can be initiated. Therefore, a successful establishment and operation of such an observatory will significantly contribute to massive public engagement and outstanding scientific awareness and potential opportunity to work on NASA projects.

3. **Introduction:** With the launch of the James Webb Space Telescope (JWST), the field of observational astronomy and astrophysics becomes worldly popular. However, the scientific ground for JWST observations is provided by ground-based telescopes. The proposed observatory with a large 0.5-meter (20-inch) telescope aperture with exceptional sensitivity will open up space exploration for the public and potential discovery space in this field planets like Jupiter, Mars, Saturn, Venus, and Neptune and their satellites, comets and asteroids. Small telescopes are already making an outstanding contribution to this field. For example, using an 11-inch telescope, a large white spot, a convective storm measuring about 3000 km on Jupiter was discovered by an amateur astronomer Mr Clyde Foster and named a 'Clyde's spot'. Such a discovery motivates NASA's planetary mission Juno to further study such features in-depth. The field of discovering and characterizing exoplanets with a chance of habitability is currently a hot research area, and small telescopes are making significant contributions towards exoplanet discovery. As a part of international Pro-Am collaborations, an outstanding effort has been made to connect small telescopes with large, space telescope-based research surveys. For example, with a merely 11-inch telescope, amateur astronomers Paul Benni and Artem Burdanov (MIT) reported three new exoplanet discoveries using the radial velocity method - a hot Jupiter, a brown dwarf, and an eclipsing binary system. With the large 20-inch aperture and robotic operation, the proposed ART will enable us to conduct the astronomical sky survey. The survey data would be valuable to generate our own catalog of sources in big data science and Machine Learning. The current ID research in the field of astronomical machine learning is restricted to the availability of survey data from International projects. Such restrictions will be withdrawn with the operation of the ART project. Another major gap area includes Outreach and Citizen Science Program (CSP), which deals with public engagement in scientific research that can only be addressed using astronomical telescopes. ART will initiate CSP with projects like finding meteorites and asteroids from a series of astronomical images and comparing sky survey images to discover potential new planets, stars and supernovae. Such activities will be part of NASA's outreach and citizen science program.

4. **Methodology:** Once the observatory dome installation, procurement and the telescope setting up procedure are completed, we will perform a thorough calibration testing separately for the telescope, the CCD camera, and the data acquisition pipeline software installed on a desktop associated with the telescope. The calibration procedure includes actual observations of planets and objects, processing the data using high-end image analysis software, and comparing the results with those obtained from similar telescopes worldwide. A course on telescope operation and observations will be proposed and designed to train MSc and BTech students for their project purpose. Projects

will be designed so that the results can be utilized as a part of more significant research, therefore, helping students to have publications and recognitions in relevant fields. Using observational data from 2nd year onwards, an imaging data bank and access software will be set up. These data banks can be utilized by Astronomers all around the world and will be made public. Outreach programs will be organized twice a

week with nearby college and school students who then will learn how to observe through a telescope, basic of our planets and take images by themselves. Another aspect of public engagement is to conduct citizen science which can be easily done with the proposed telescope. Images from multiple scanning observations with the night sky will be acquired by citizens of all ages and will be shared on our website. They will be asked to find new patterns in the images by comparing images from several nights. The name of the discoverer as well as the name of the asteroid, will be recorded in the NASA asteroid database, and the certificates will be issued by IITH.

5. **Target Population:** The proposal aim for 80% of its time would be dedicated to outreach programs and citizen science, including school kids, college students, and members of different non-academic communities and the general public, 20% use of researchers, including BTech/MSc project students working in the field of Astronomy and Astrophysics, Data mining, Data Science, Machine Learning.

6. **Expected Outcome:** Three major outputs are expected from the ART project: (1) Given the size of the telescope and the typical seeing of 1.5 arcsec, the limiting apparent optical (V) magnitude of the proposed system would be 14.8, which allows us to detect at least ~36 million stars, ~1126 galaxies,~370 nebulas and all planets with their satellites. This is a drastic step that will allow not only the detection of faint and distant structured objects like galaxies, nebulas, and star-forming regions but also allows us to conduct further detailed research in characterizing their evolution, structures, dynamics and radiation properties. Using narrow-band filters, we will be able to provide the spectroscopic nature of these objects as well as the multi-wavelength view. The research derivative will create further projects where students from schools and colleges can get involved. Such projects can be divided into two categories: (1) Imaging Projects which include multi-coloured imaging analysis (which includes learning stacking and noise reduction techniques) of different galaxies and nebulae, and (2) Photometric projects include time-signal analysis of variable stars like eclipsing binaries, Cataclysmic Variables, measuring orbital properties of binary stars, photometric studies of asteroids, quasars, planetary satellites. Such projects will motivate students to further pursue a research career, enhance learning capabilities of new analysis techniques, and create resources for academic institutions which could be utilized by a range of professionals like teachers, students, data analysts and astronomers. Such an effort will increase the visibility of Indian astronomical activities on a global scale. (2) With such capabilities, we will build our own Astro Source Catalog (AASC)with the (I) multi-wavelength images and (II) filter spectra obtained from ART. Such a library of data will be extremely beneficial for students working in relevant fields.

Moreover, the database established from this project will act as supportive research data for large astronomical and planetary missions like JWST, NASA, Aditya, ISRO

7. **Timeline and Budget:** The dome, and telescope, along with the necessary filters, eyepieces and software to operate; a desktop server for operating the telescope and storing data will cost 18 lakhs (first year). Expenditure for annual maintenance, organizing outreach and citizen science programs, workshops and conferences on data usage, publication, and collaborations will be around one lakh each subsequent year (second and third year).

Contact person/Proposer :   Designation: Assistant Professor Dr Mayukh Pahari,

Department of Physics, IIT Hyderabad Email: mayukh@phy.iith.ac.in Phone: +918207039036