





## ST. XAVIER'S COLLEGE, MAPUSA GOA

College with Potential for Excellence  
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Awarded DBT STAR College Scheme

<b>Nature of Event</b> (Workshop, Guest Lecture, Add-on Course, Seminar, etc.)	TYBSc Project
<b>Name of Department</b>	Physics
<b>Faculty In-Charge</b>	Mr. Pradeep Morajkar
<b>Stratum of Event</b> (College, State, Regional, National)	State
<b>Title of Event</b>	Astronomical Telescope Making
<b>Date of Event</b>	15 <sup>th</sup> March 2024 (Inauguration)
<b>Venue</b>	St. Xavier's College Mapusa Goa
<b>Resource Person details</b>	Dr. Reshma Raut Dessai
<b>Objective/ Scope of Event</b>	The primary objective was to construct a Newtonian telescope leveraging the simplicity and efficiency of a Dobsonian mount. The project aimed to provide hands-on experience in telescope fabrication, assembly and alignment.
<b>Particulars of Event</b>	<p>A group of 8 students from TY BSc Physics constructed an Astronomical Telescope as part of their TY project under the guidance of Mr. Pradeep Morajkar, Associate Professor at St. Xavier's College, Mapusa - Goa.</p> <p>Materials such as the mirrors, eyepiece lenses, viewfinder, and laser pointer were sourced online. The tube assembly with all the optical fittings was fabricated with a lot of careful measuring and constant adjustments. The mount was constructed and the optical tube assembly was mounted. The collimation and further fine-tuning of the mirrors and lenses was done. Three types of eyepiece lenses, namely, planetary, Kellner and Barlow lens were utilized interchangeably in line with the task at hand. A trial in the form of a sky observation was done to be well-versed with the actual functioning of the telescope before submission. All this was carried out with immense cooperation between the students involved and also with the help and support of Mr. Pradeep Morajkar.</p>

<b>Outcome of Event</b>	Students gained hands-on experience in telescope fabrication, assembly and alignment
<b>Feedback</b>	Students understood construction, working and application of Astronomical Telescope.
<b>Total No. of Participants</b>	8
<b>Photographs</b>	 <p>    null, Goa, India  HRX5+56M, near Xavier college, Mapusa, Goa 403507,  India  Long 73.808038°  Lat 15.597963°  22/2/2024 11:21 AM </p>