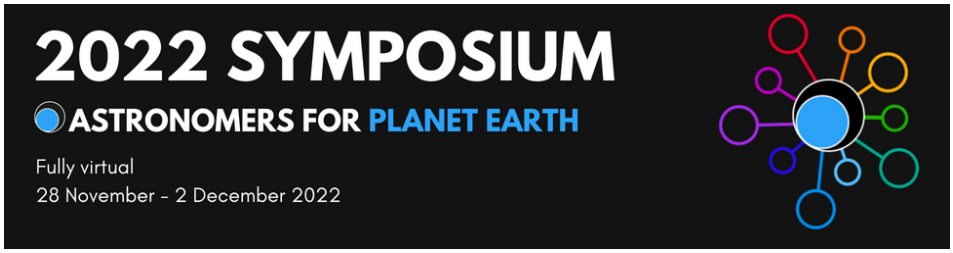

Contribution ID: **49** Type: **Talk**

STEM+A@Astronomy: How to Integrate Astronomy Education into Interactive Classroom and Social Innovative Project

As an interdisciplinary natural science, science communication through astronomy is always a great medium to motivate learners to develop future skills and integrate knowledge with innovative thinking mindsets. However, from the traditional perspective, learning astronomy might require scientific background and academic experience to contribute to astronomy-related research or hands-on learning activities. For instance, building a customized telescope usually requires engineering techniques in DIY making, computational prototyping, and 3D printing. The talk will introduce the latest approaches to teaching astronomy by building blocks. It would be helpful as an educational tool for making astronomical prototypes or demonstrating space science in a more accessible way, by customizing the design in different shapes and color combinations with low-tech requirements.

ASTROx is an interdisciplinary project that aims to connect astronomy with other possible academic disciplines or subjects, solving real-life issues by design thinking and user-centered innovative approaches. The talk will also showcase a youth-led social innovation project about dark-sky advocacy and science communication, solving real life issues in Hong Kong, one of the most light-polluted cities in the world. Youth learners explored multiple approaches to raise awareness of Artificial Light at Night (ALAN) through light pollution field trips, social observations, design thinking workshops, and hands-on activities.

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