



# Space, Astronomy and Astrophotography

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# Space and Astronomy

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## Training Sessions

# Digital Camera Training Sessions

1. Basics Camera Controls
  - Focus
  - Exposure control 1: Aperture
  - Exposure control 2: Shutter
  - Exposure control 3: ISO
2. Digital settings (White Balance, Colors, File Format)
3. Night Photography
4. MILKY WAY!

# Telescope Training Sessions

1. Basic Telescope operations
  - Finder collimation
  - Aiming a target object
  - Focusing
2. Polar Alignment (rough alignment, precise alignment)
3. Picture taking with the telescope
  - with smartphone
  - with DSLR/mirrorless camera
  - with telescope webcam and computer

# Digital camera training 1

## Basic Operations

1. Focus
2. Exposure control 1: Aperture
3. Exposure control 2: Shutter speed
4. Exposure control 3: ISO Sensitivity

# Digital Camera Training 2

## Digital Controls

- White Balance: warm/cold look
- File type and size (RAW vs JPEG, compression)
- Colours (Saturation, contrast)

# Digital Camera Training 3

## Night Photography

- Tripod setup
- Focusing in dim light
- Measuring and setting exposure in dim light
- Triggering camera on tripod

# Digital Camera Training 4

## Milky Way

- Tripod setup & camera preparation
- Framing your picture
- Focussing
- Exposure parameters
- Single exposure images
- Multiple stacked images



# Telescope Training 1

## Basic Operations

- Telescope Setup
- Finder collimation
- Aiming at a target object: coarse aiming, fine-tuning
- Focussing the telescope
- Visual observation

# Telescope Training 2

## Polar Alignment

- Find your local GPS coordinates
- Rough alignment with compass and telescope latitude dial
- Precise alignment, aiming at Polaris
- Check polar alignment accuracy:  
visual observations over an extended period of time
- Image stabilization with Right Ascension Motor Drive

# Telescope Training 3

## Picture taking with the telescope

- Telescope setup in polar alignment
- Visual observation
- Image stabilization with Right Ascension Motor Drive
- Picture taking with smartphone
- Picture taking with DSLR/mirrorless camera
- Picture taking with webcam and computer
- Multiple pictures for stacking