

# Diagrams and Schematics Using Tikz

A Summer training initiative by

The Free and Open Source Software (FOSS) Group

*Indian Institute of Space Science and Technology, Thiruvananthapuram*

## **IMPORTANT INSTRUCTIONS — READ CAREFULLY**

Answer **any one of the following questions**. Submissions must be made as a zip file named as “<student\_name>\_<question\_number>.zip” containing similarly named .tex and .pdf files containing the T<sub>E</sub>X source and the output respectively. For example, Nidish\_2.zip.

**Submissions may be made only through email to  
fossgroup.iist@gmail.com on or before July 10, 2017**

1. Draw the Logo of FOSS Group, IIST (as shown below) using Tikz. You can ignore the shadows and the shadings — a simple filled line drawing would suffice.



Figure 1: FOSS Group, IIST

2. Draw the free-body diagram of a square mass block ( $M$ ) attached to a rigid wall through a spring ( $K$ ) and a damper ( $b$ ) (in parallel). Specify the forces involved with appropriate arrows.