

# Introduction

The Physics and Astronomy Department (DIFA) hosts a parallel computing infrastructure directly accessible to its staff members.

Access for external members (i.e. non-DIFA staff) can be provided for collaborative research projects involving a DIFA staff member as reference.

This infrastructure is made up of three different groups (or islands) of computing nodes with different hardware features and target usage:

## BladeRunner

a set of compute nodes targeted to low-parallelism jobs (with hostnames bldNN)

## Matrix

a set of compute nodes targeted to massively parallel jobs (with hostnames mtxNN)

## GPU

a set of compute nodes with Graphic Processing Units besides standard CPUs (with hostnames gpuNN)

For a more detailed description of the hardware features and access policies of the different groups of nodes see the [Resources](#) section.

The access to the infrastructure is provided by three frontend servers that can be used to connect and transfer data to the cluster using the standard protocols ssh, scp, rsync. The updated instructions for the access are placed in the [Access](#) section.

From:

<https://apps.difa.unibo.it/wiki/> - **Wiki DIFA**

Permanent link:

<https://apps.difa.unibo.it/wiki/oph:cluster:introduction>

Last update: **2025/02/10 12:17**

