Which partition should I use for my jobs?

> ⚠ **This information is not valid for users of the Red Española de Supercomputación (*more information*).**

In order to improve the scheduling and reduce job's waiting time, a structure of partitions is defined.

The following table summarises all the relevant information of every general available partition.

Partition	SLURM directive	#Nodes	Nodes	Cores / node	Threads / core	Mem (MB) / core	Limits	Information
std	#SBATCH -p std	57	pirineus [7-62]	48	1	3900	-	The default partition, with standard nodes. **Most jobs will use it.**
std-fat	#SBATCH -p std-fat	6	pirineus [1-6]	48	1	7900	-	Partition that includes standard nodes with more memory per core. Designed for jobs that require between 3900 MB and 7900 MB of memory per core.
mem	#SBATCH -p mem	2	canigo[1-2]	192	1	24064	-	This partition includes the shared memory machine named *canigo*. Designed for jobs that require an extensive use of memory (up to 24064 MB per core).
gpu	#SBATCH -p gpu	4	pirineusgpu[1-4]	48 + 2 GPGPU	1	3900	-	Partition with nodes that are equipped with P100 Nvidia GPGPU. Designed for jobs that require the use of GPGPU.
knl	#SBATCH -p knl	4	pirineuskn l[1-4]	68	4	5600	-	Partition with nodes equipped with 2nd Generation Intel® Xeon Phi™ Processors. Designed for jobs that require the use of Knight's Landing architecture.
express	#SBATCH -p express	1	pirineus63	48	1	3900	1 hour and 4 cores per job	This partition is intended for test jobs, either interactive or batch.

Related articles

- *What disk storage locations are available?*

- *Which partition should I use for my jobs?*
- *Can I use my LSF scripts?*
- *write error: Disk quota exceeded*
- *Why is my job permanently in PENDING mode?*