



planetmath.org

Math for the people, by the people.

ringed space

Canonical name	RingedSpace
Date of creation	2013-03-22 16:18:15
Last modified on	2013-03-22 16:18:15
Owner	Mathprof (13753)
Last modified by	Mathprof (13753)
Numerical id	5
Author	Mathprof (13753)
Entry type	Definition
Classification	msc 18F20

A *ringed space* is a topological space X together with a sheaf of commutative rings \mathcal{O}_X on X .

Examples.

1. Let X be a topological space and let \mathcal{O}_X be the sheaf of continuous functions.
2. Let X be a differentiable manifold and let \mathcal{O}_X be the sheaf of differentiable functions.

References

- [1] I.R. Shafarevich, *Basic Algebraic Geometry*, Springer-Verlag, 1977