

planetmath.org

Math for the people, by the people.

analytic sheaf

Canonical name AnalyticSheaf

Date of creation 2013-03-22 17:39:02 Last modified on 2013-03-22 17:39:02

Owner jirka (4157) Last modified by jirka (4157)

Numerical id 5

Author jirka (4157) Entry type Definition Classification msc 32C35 Let M be a complex manifold. Let \mathcal{O} be the sheaf of germs of analytic functions (which is a sheaf of rings) and let \mathcal{F} be a sheaf of \mathcal{O} -modules. \mathcal{F} is then called an *analytic sheaf*.

Example. Suppose X is an analytic vector bundle over M. Then the sheaf of germs of analytic sections of X is an analytic sheaf.

Example. The sheaf of germs of meromorphic functions on M is an analytic sheaf.

References

- [1] Lars Hörmander., North-Holland Publishing Company, New York, New York, 1973.
- [2] Steven G. Krantz., AMS Chelsea Publishing, Providence, Rhode Island, 1992.