



| | |
|---|---|
| Title: | Study of Absolute Values |
| Authors: | Kumar, Rahul (/jspui/browse?type=author&value=Kumar%2C+Rahul) |
| Keywords: | Mathematics<br>Absolute Values |
| Issue Date: | 26-Jun-2015 |
| Publisher: | IISER-M |
| Abstract: | The notion of an absolute value of a field K is a generalization of the notion of ordinary absolute value of the field C of complex numbers. A real valued function defined on a field K into non-negative real numbers is called absolute value of K if (x) = 0 , x = 0; (xy) = (x) (y) and (x + y) (x) + (y) 8x; y 2 K: In this thesis, we study absolute values and its basic properties and some significant results like Ostrowski's Theorem, Approximation Theorem and Independence Theorem. We also discuss Archimedean and non-Archimedean absolute values, completion of fields with respect to absolute values. A non-Archimedean absolute value gives rise to what is called (additive) valuation. A detailed exposition of discrete valuations is brought out. We also study Hensel's Lemma and some of its applications. |
| URI: | http://hdl.handle.net/123456789/671 (http://hdl.handle.net/123456789/671) |
| Appears in Collections: | MS-09 (/jspui/handle/123456789/393) |

Files in This Item:

| File | Description | Size | Format | |
|---|---|---|---|---|
| MS-09101.pdf (/jspui/bitstream/123456789/671/1/MS-09101.pdf) | | 490.44 kB | Adobe PDF | View/Open (/jspui/bitstream/123456789/671/1/MS-0 |

Show full item record (/jspui/handle/123456789/671?mode=full) (/jspui/handle/123456789/671/statistics)