1. Record Nr.   UNINA9910795161103321

   Autore   Gelb Robert

   Titolo   D-modules : local formal convolution of elementary formal
                             meromorphic connections / / Robert Gelb

   Pubbl/distr/stampa   Berlin : , : Logos Verlag, , [2015]
                             ©2015

   ISBN   3-8325-9144-3

   Descrizione fisica   1 online resource (98 pages)

   Collana   Augsburger Schriften zur Mathematik, Physik und Informatik ; ; 27

   Disciplina   512.4

   Soggetti   D-modules

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico   Monografia

   Note generali   PublicationDate: 20150228

   Nota di bibliografia   Includes bibliographical references.

   Sommario/riassunto   Long description: According to the classical theorem of Levelt-
                             Turrittin-Malgrange and its refined version, developed by Claude
                             Sabbah, any meromorphic connection over the field of formal Laurent
                             series in one variable can be decomposed in a direct sum of so called
                             elementary formal meromorphic connections.   Changing the
                             perspective, one can also study operations that can be carried out with
                             such special differential modules. There are already formulas for the
                             tensor product or the local formal Fourier transform, for example. This
                             thesis analyses the local formal convolution (the multiplicative case as
                             well as the additive case) of two elementary formal meromorphic
                             connections and how the convolution can itself be decomposed into a
                             direct sum of elementary formal meromorphic connections again.