



# Library Indian Institute of Science Education and Research Mohali



**DSpace@IISERMohali (/jspui/)**

**/ Publications of IISER Mohali (/jspui/handle/123456789/4)**

**/ Research Articles (/jspui/handle/123456789/9)**

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/5814>

Title:	splittings of differential matrix algebras
Authors:	Kulshrestha, Amit (/jspui/browse?type=author&value=Kulshrestha%2C+Amit) Singla, Kanika (/jspui/browse?type=author&value=Singla%2C+Kanika)
Issue Date:	2023
Publisher:	Elsevier
Citation:	Journal of Algebra, 634, 74-96.
Abstract:	It is well known that central simple algebras are split by suitable finite Galois extensions of their centers. In [4] a counterpart of this result was studied in the set up of differential matrix algebras, wherein Picard-Vessiot extensions that split matrix differential algebras were constructed. In this article, we exhibit instances of differential matrix algebras which are split by finite extensions. In some cases, we relate the existence of finite splitting extensions of a differential matrix algebra to the triviality of its tensor powers, and show in these cases, that orders of differential matrix algebras divide their degrees.
Description:	Only IISER Mohali authors are available in the record.
URI:	10.1016/j.jalgebra.2023.06.019 (10.1016/j.jalgebra.2023.06.019) <a href="http://hdl.handle.net/123456789/5814">http://hdl.handle.net/123456789/5814</a> ( <a href="http://hdl.handle.net/123456789/5814">http://hdl.handle.net/123456789/5814</a> )
Appears in Collections:	Research Articles (/jspui/handle/123456789/9)

Files in This Item:

File	Description	Size	Format	
Need To Add...Full Text_PDF_.pdf (/jspui/bitstream/123456789/5814/1/Need%20To%20Add%e2%80%a6Full%20Text_PDF_.pdf)		15.36 kB	Adobe PDF	<a href="#">View/Open (/jspui/bitstream/123456789/5814/1/Need%20To%20Add%e2%80%a6Full%20Text_PDF_.pdf)</a>

[Show full item record \(/jspui/handle/123456789/5814?mode=full\)](#)

[Statistics \(/jspui/handle/123456789/5814/statistics\)](#)

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.