cases	doc_1		doc_2		decision	id
	authors	• D. Auckly • L. Kapitanski • J. M. Speight	**authors**	• D. Auckly • L. Kapitanski • M. Speight	DUPLICATES	31
	title	Geometry and analysis in nonlinear sigma models	**title**	Geometry and analysis in non-linear sigma models		
	publication_date	2006-11-27 00:00:00	**publication_date**	2004-11-09 00:00:00		
	source	SupportedSources.INTERNET_ARCHIVE	**source**	SupportedSources.INTERNET_ARCHIVE		
	journal	American Mathematical Society (AMS)	**journal**			
	volume		**volume**			
	doi	10.1090/s1061-0022-06-00940-x	**doi**			
	urls	• https://web.archive.org/web/20200812215619/https://www.ams.org/journals/spmj/2007-18-01/S1061-0022-06-00940-X/S1061-0022-06-00940-X.pdf	**urls**	• https://archive.org/download/arxiv-hep-th0411101/hep-th0411101.pdf		
	id	id-7520389796563793167	**id**	id-8781678388058078750		
	abstract	The configuration space of a nonlinear sigma model is the space of maps from one manifold to another. This paper reviews the authors' work on nonlinear sigma models with target a homogeneous space. It begins with a description of the components, fundamental group, and cohomology of such configuration spaces, together with the physical interpretations of these results. The topological arguments given generalize to Sobolev maps. The advantages of representing homogeneousspace-valued maps by flat connections are described, with applications to the homotopy theory of Sobolev maps, and minimization problems for the Skyrme and Faddeev functionals. The paper concludes with some speculation about the possibility of using these techniques to define new invariants of manifolds. Contents 2000 Mathematics Subject Classification. Primary 81T13.	**abstract**	The configuration space of a non-linear sigma model is the space of maps from one manifold to another. This paper reviews the authors' work on non-linear sigma models with target a homogeneous space. It begins with a description of the components, fundamental group, and cohomology of such configuration spaces together with the physical interpretations of these results. The topological arguments given generalize to Sobolev maps. The advantages of representing homogeneous space valued maps by flat connections are described, with applications to the homotopy theory of Sobolev maps, and minimization problems for the Skyrme and Faddeev functionals. The paper concludes with some speculation about the possiblility of using these techniques to define new invariants of manifolds.		
	versions		**versions**			