

cases	doc_1		doc_2		decision	id
	authors	<ul style="list-style-type: none"><li>Motohico Mulase</li><li>Michael Penkava</li></ul>	authors	<ul style="list-style-type: none"><li>Mulase, Motohico</li><li>Penkava, Michael</li></ul>	DUPLICATES	966
	title	Volume of representation varieties	title	Volume of representation varieties		
	publication_date	2002-12-01 20:43:51+00:00	publication_date	2002-01-01 00:00:00		
	source	SupportedSources.ARXIV	source	SupportedSources.CORE		
	journal	None	journal			
	volume		volume			
	doi		doi	None		
	urls	<ul style="list-style-type: none"><li>http://arxiv.org/pdf/math/0212012v1</li><li>http://arxiv.org/abs/math/0212012v1</li><li>http://arxiv.org/pdf/math/0212012v1</li></ul>	urls	<ul style="list-style-type: none"><li>http://arxiv.org/abs/math/0212012</li></ul>		
	id	id-6035788199791313097	id	id5133532016927738254		
	abstract	We introduce the notion of volume of the representation variety of a finitely presented discrete group in a compact Lie group using the push-forward measure associated to a map defined by a presentation of the discrete group. We show that the volume thus defined is invariant under the Andrews-Curtis moves of the generators and relators of the discrete group, and moreover, that it is actually independent of the choice of presentation if the difference of the number of generators and the number of relators remains the same. We then calculate the volume of the representation variety of a surface group in an arbitrary compact Lie group using the classical technique of Frobenius and Schur on finite groups. Our formulas recover the results of Witten and Liu on the symplectic volume and the Reidemeister torsion of the moduli space of flat G-connections on a surface up to a constant factor when the Lie group G is semisimple.	abstract	We introduce the notion of volume of the representation variety of a finitely presented discrete group in a compact Lie group using the push-forward measure associated to a map defined by a presentation of the discrete group. We show that the volume thus defined is invariant under the Andrews-Curtis moves of the generators and relators of the discrete group, and moreover, that it is actually independent of the choice of presentation if the difference of the number of generators and the number of relators remains the same. We then calculate the volume of the representation variety of a surface group in an arbitrary compact Lie group using the classical technique of Frobenius and Schur on finite groups. Our formulas recover the results of Witten and Liu on the symplectic volume and the Reidemeister torsion of the moduli space of flat G-connections on a surface up to a constant factor when the Lie group G is semisimple.Comment: 27 pages in AMS-LaTeX forma		
	versions		versions			