cases	doc_1		doc_2		decision	id
	authors	• Fornoni, M. • Rondi, L.	**authors**	• Matteo Fornoni • Luca Rondi	DUPLICATES	533
	title	Mosco convergence of Sobolev spaces and Sobolev inequalities for nonsmooth domains	**title**	Mosco convergence of Sobolev spaces and Sobolev inequalities for nonsmooth domains		
	publication_date	2022-11-05 00:00:00	**publication_date**	2022-03-08 11:00:02+00:00		
	source	SupportedSources.CROSSREF	**source**	SupportedSources.ARXIV		
	journal		**journal**	None		
	volume		**volume**			
	doi	10.1007/s00526-022-02357-7	**doi**			
	urls	• https://link.springer.com/content/pdf/10.1007/s00526-022-02357-7.pdf • https://link.springer.com/article/10.1007/s00526-022-02357-7/fulltext.html • https://link.springer.com/content/pdf/10.1007/s00526-022-02357-7.pdf • http://dx.doi.org/10.1007/s00526-022-02357-7	**urls**	• http://arxiv.org/pdf/2203.04004v1 • http://arxiv.org/abs/2203.04004v1 • http://arxiv.org/pdf/2203.04004v1		
	id	id2945702662027817371	**id**	id-109984258824618720		
	abstract		**abstract**	We find extremely general classes of nonsmooth open sets which guarantee Mosco convergence for corresponding Sobolev spaces and the validity of Sobolev inequalities with a uniform constant. An important feature of our results is that the conditions we impose on the open sets for Mosco convergence and for the Sobolev inequalities are of the same nature, therefore it is easy to check when both are satisfied. Our analysis is motivated, in particular, by the study of the stability of the direct acoustic scattering problem with respect to the scatterer, which we also discuss. Concerning Mosco convergence in dimension 3 or higher, our result extends all those previously known in the literature. Concerning Sobolev inequalities, our approach seems to be new and considerably simplifies the conditions previously required for the stability of acoustic direct scattering problems.		
	versions		**versions**			