		doc_1		doc_2	decision	id
	authors	Stephan I. Tzenov Ronald C. Davidson	authors	Stephan I. Tzenov Ronald C. Davidson		
	title	Hamiltonian Formalism for Solving the Vlasov-Poisson Equations and Its Application to the Coherent Beam-Beam Interaction	title	Hamiltonian Formalism for Solving the Vlasov-Poisson Equations and Its Applications to Periodic Focusing Systems and the Coherent Beam-Beam Interaction		
	publication date 2001-06-01 13:33:14+00:00		publication_date 2001-10-04 12:51:20+00:00		_	
	source	SupportedSources.ARXIV	source	SupportedSources.ARXIV		
	journal	Conf.Proc.C0106181:2075-2077,2001	journal	Phys.Rev.ST Accel.Beams 5 (2002) 021001		
	volume	,	volume			
cases	doi		doi	10.1103/PhysRevSTAB.5.021001	NOT	
	urls	 http://arxiv.org/pdf/physics/0106003v1 http://arxiv.org/abs/physics/0106003v1 http://arxiv.org/pdf/physics/0106003v1 	urls	 http://arxiv.org/pdf/physics/0110014v1 http://dx.doi.org/10.1103/PhysRevSTAB.5.021001 http://arxiv.org/abs/physics/0110014v1 http://arxiv.org/pdf/physics/0110014v1 	DUPLICATES	3 377
	id	id5210095978192341359	id	id3170279473022706645	$\exists \parallel$	
	abstract versions	A Hamiltonian approach to the solution of the Vlasov-Poisson equations has been developed. Based on a nonlinear canonical transformation, the rapidly oscillating terms in the original Hamiltonian are transformed away, yielding a new Hamiltonian that contains slowly varying terms only. The formalism has been applied to the coherent beam-beam interaction, and a stationary solution to the transformed Vlasov equation has been obtained.		A Hamiltonian approach to the solution of the Vlasov-Poisson equations has been developed. Based on a nonlinear canonical transformation, the rapidly oscillating terms in the original Hamiltonian are transformed away, yielding a new Hamiltonian that contains slowly varying terms only. The formalism has been applied to the dynamics of an intense beam propagating through a periodic focusing lattice, and to the coherent beam-beam interaction. A stationary solution to the transformed Vlasov equation has been obtained.		