

cases	doc_1		doc_2		decision	id
	authors	<ul style="list-style-type: none">Ankit Kumar PandaAshutosh DashRajesh BiswasVictor Roy	authors	<ul style="list-style-type: none">Ankit Kumar PandaAshutosh DashRajesh BiswasVictor Roy	DUPLICATES	95
	title	Relativistic non-resistive viscous magnetohydrodynamics from the kinetic theory:a relaxation time approach	title	Relativistic non-resistive viscous magnetohydrodynamics from the kinetic theory:a relaxation time approach		
	publication_date	2020-11-03 10:20:44+00:00	publication_date	2020-11-03 00:00:00		
	source	SupportedSources.ARXIV	source	SupportedSources.INTERNET_ARCHIVE		
	journal	None	journal			
	volume		volume			
	doi	10.1007/JHEP03(2021)216	doi			
	urls	<ul style="list-style-type: none">http://arxiv.org/pdf/2011.01606v1http://dx.doi.org/10.1007/JHEP03(2021)216http://arxiv.org/abs/2011.01606v1http://arxiv.org/pdf/2011.01606v1	urls	<ul style="list-style-type: none">https://web.archive.org/web/20201106104854/https://arxiv.org/pdf/2011.01606v1.pdf		
	id	id2680456727776075967	id	id6107593396752749364		
	abstract	We derive the relativistic non-resistive, viscous second-order magnetohydrodynamic equations for the dissipative quantities using the relaxation time approximation. The Boltzmann equation is solved for a system of particles and antiparticles using Chapman-Enskog like gradient expansion of the single-particle distribution function truncated at second order. In the first order, the transport coefficients are independent of the magnetic field. In the second-order, new transport coefficients that couple magnetic field and the dissipative quantities appear which are different from those obtained in the 14-moment approximation \cite{Denicol:2018rbw} in the presence of a magnetic field. However, in the limit of the weak magnetic field, the form of these equations are identical to the 14-moment approximation albeit with a different values of these coefficients. We also derive the anisotropic transport coefficients in the Navier-Stokes limit.	abstract	We derive the relativistic non-resistive, viscous second-order magnetohydrodynamic equations for the dissipative quantities using the relaxation time approximation. The Boltzmann equation is solved for a system of particles and antiparticles using Chapman-Enskog like gradient expansion of the single-particle distribution function truncated at second order. In the first order, the transport coefficients are independent of the magnetic field. In the second-order, new transport coefficients that couple magnetic field and the dissipative quantities appear which are different from those obtained in the 14-moment approximation in the presence of a magnetic field. However, in the limit of the weak magnetic field, the form of these equations are identical to the 14-moment approximation albeit with a different values of these coefficients. We also derive the anisotropic transport coefficients in the Navier-Stokes limit.		
	versions		versions			