

cases	doc_1		doc_2		decision	id
			authors	<ul style="list-style-type: none">Fyfe, D.Montgomery, D.	DUPLICATES	1190
			title	High-beta turbulence in two-dimensional magnetohydrodynamics		
	authors	<ul style="list-style-type: none">David FyfeDavid R. Montgomery	publication_date	None		
	title	High-beta turbulence in two-dimensional magnetohydrodynamics	source	SupportedSources.CORE		
	publication_date	1976-10-01 00:00:00	journal			
	source	SupportedSources.OPENALEX	volume			
	journal	Journal of Plasma Physics	doi	None		
	volume	16	urls	<ul style="list-style-type: none">https://core.ac.uk/download/pdf/42883417.pdf		
	doi	10.1017/s0022377800020158	id	id-8597905656382620304		
	urls	<ul style="list-style-type: none">https://openalex.org/W2067496204https://doi.org/10.1017/s0022377800020158https://ntrs.nasa.gov/api/citations/19760015911/downloads/19760015911.pdf	abstract	Incompressible turbulent flows were investigated in the framework of ideal magnetohydrodynamics. Equilibrium canonical distributions are determined in a phase whose coordinates are the real and imaginary parts of the Fourier coefficients for the field variables. The magnetic field and fluid velocity have variable x and y components, and all field quantities are independent of z. Three constants of the motion are found which survive the truncation in Fourier space and permit the construction of canonical distributions with three independent temperatures. Spectral densities are calculated. One of the more novel physical effects is the appearance of macroscopic structures involving long wavelength, self-generated, magnetic fields ("magnetic islands"). In the presence of finite dissipation, energy cascades to higher wave numbers can be accompanied by vector potential cascades to lower wave numbers, in much the same way that in the fluid dynamic case, energy cascades to lower wave numbers accompany entropy cascades to higher wave numbers		
	id	id-2243332878640034617	versions			
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