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Correction. Statistical Mechanics of Nonlinear Wave Equations (3). Metric Transitivity for Hyperbolic Sine-Gordon[1]

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Mr. Brian Rider has kindly pointed out that my proof of the metric transitivity of the sine-Gordon flow is not right. The statement that the horizontal diffusion is seen on rays at inclination $\leqslant 45°$ is correct, as is the final illustration by Klein–Gordon, but all the rest is wrong and must be discarded. Krichever's formula for the solution of sine-Gordon, remarkable as it may be, is not responsive to the question, which is this: Under the flow of a nonlinear wave equation $\partial^2 Q/\partial t^2 - \partial^2 Q/\partial x^2 + f(Q) = 0$, with odd restoring force $f(Q)$ of sufficient strength, the solution $Q(t, x)$ should depend less and less as $t \uparrow \infty$ on any finite segment of the data $Q_0(x) = Q(0, x)$ and $P_0(x) = Q^{\bullet}(0, x)$ at time $t = 0$. Then the "vertical" tail field measuring $Q(t, x)$ for $x \in R$ and $t \geqslant T \uparrow \infty$ will be contained in the horizontal tail field measuring the data for $|x| \geqslant L \uparrow \infty$, and since this data will even be mixing, so the triviality of *its* tailfield will imply the metric transitivity of the temporal flow. This crucial inclusion of the vertical tail field in the horizontal is neither proven nor even properly addressed by what I have done.

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