

Transversal wave maps from foliated Minkowski spaces into foliated Riemannian manifolds

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We study transversal wave maps from foliated Minkowski spaces into foliated Riemannian manifolds. We give examples of transversal wave maps, and show that there are wave maps which are not transversal wave maps and there are transversal wave maps which are not wave maps either. We prove a theorem that if f is a wave map with some assumptions, then f is a transversal wave map. We also prove that if f is a transversal wave map, then f satisfies the transverse conservation law. We finally investigate the well-posedness of transversal wave maps.