TANNAKA–KREIN DUALITY FOR COMPACT GROUPOIDS II, DUALITY

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Abstract. We show that from the representation theory of a locally non-trivial compact groupoid whose irreducible representations separate its points, one can reconstruct the groupoid using a procedure similar to the Tannaka-Krein duality for compact groups. We study the Fourier and Fourier-Plancherel transforms and prove the Plancherel theorem for compact groupoids.

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