

Quasi-linear functionals on locally compact spaces

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We study positive quasi-linear functionals on locally compact spaces. Then we establish a correspondence between topological measures and positive quasi-linear functionals. We show that there is an order-preserving bijection between compact-finite quasi-linear functionals and compact-finite topological measures, which is an order-preserving isometric isomorphism when quasi-linear functionals and topological measures have finite norms. We further study properties of quasi-linear functionals and give an explicit example of a quasi-linear functional.
