Werk

Label: Abstract

Jahr: 1980

PURL: https://resolver.sub.uni-goettingen.de/purl?31311157X_0105|log100

Kontakt/Contact

Digizeitschriften e.V.
SUB Göttingen
Platz der Göttinger Sieben 1
37073 Göttingen

info@digizeitschriften.de

SUMMARIES OF ARTICLES PUBLISHED IN THIS ISSUE

(Publication of these summaries is permitted)

MIROSLAV DONT, Praha: *Poznámka o lineární míře Vituškinových množin.* (A note on linear measure of Vitushkin's sets.) Čas. pěst. mat. *105* (1980), 23—30. (Original paper.)

It is shown that there is a compact set $M \subset \langle 0, 1\rangle \times \langle 0, 1\rangle \subset R^2$ with linear Hausdorff measure 1 but such that its orthogonal projections on the coordinate axes are the whole segments $\langle 0, 1\rangle \times \{0\}$, $\{0\} \times \langle 0, 1\rangle$. The construction of that set is the same as Vitushkin's construction of the set with positive linear measure but with zero analytic capacity.

ALOIS KLÍČ, Praha: *On exceptional values of holomorphic mappings of Riemann surfaces.* Čas. pěst. mat. *105* (1980), 41—55. (Original paper.)

Let $f: V \to M$ be a holomorphic mapping from an open Riemann surface V into a closed Riemann surface M. In this paper the generalized Cartan's formulae are derived. These formulae are used to prove theorems giving sufficient conditions for $\delta(a_0) = 0$, $a_0 \in M$.

KAREL SVOBODA, Brno: *On characterization of the sphere in E^4 by means of the parallelness of certain vector fields.* Čas. pěst. mat. *105* (1980), 56—72. (Original paper.)

In this paper the author presents a certain generalization of the result contained in his previous paper. Using the parallelness of a certain normal vector field associated to a given couple of tangent vector fields, the author proves theorems analogous to those of his previous paper to get the base for other considerations.

ANTON DEKRÉT, Zvolen: *On forms and connections on fibre bundles.* Čas. pěst. mat. *105* (1980), 73—80. (Original paper.)

In this paper some properties of the differentiations of type i_* on $\Lambda(E)$ determined by the connection form $v : TE \to VTE$ and by the curvature form $\Phi : TE \wedge TE \to VTE$ of a connection $\Gamma : E \to J^1E$ on a fibre space $\pi : E \to M$ are described. If a bilinear form ω on E is regular on fibres of E then there is such a connection $\overline{\Gamma}$ that $\omega(Y, X) = 0$ for any vertical vector Y and any horizontal vector X. Necessary and sufficient conditions for $\overline{\Gamma}$ to be integrable are found in terms of ω.