

**Vinogradov, A. M.; Yumaguzhin, V. A.**

**Differential invariants of webs on two-dimensional manifolds.** (English. Russian original)

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Math. Notes 48, No. 1, 639-647 (1990); translation from Mat. Zametki 48, No. 1, 26-37 (1990).

An  $n$ -web of curves on a two-dimensional manifold appears naturally as a web of characteristic curves of a hyperbolic system of differential equations of first order with two independent variables. For such a web scalar differential invariants are found. This allows the authors to find many properties of  $n$ -webs. In particular, they find some new necessary and sufficient conditions for an  $n$ -web to be parallelizable.

Remarks: The authors use the term “linear” instead of “parallelizable”. However, in web theory an  $n$ -web is linear if it is equivalent to an  $n$ -web consisting of  $n$  families of straight lines, and it is parallelizable if the straight lines of each of the families indicated above are parallel.]

Reviewer: [V.V.Goldberg](#)

**MSC:**

[53A60](#) Differential geometry of webs

Cited in **1** Review  
Cited in **4** Documents

**Keywords:**

[hyperbolic system of differential equations](#); [scalar differential invariants](#); [n-webs](#); [parallelizable](#)

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**References:**

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