THEOREM 4. *If the boundary* Γ *of the plane bounded connected and simply connected domain* γ *contains an indecomposable continuum* D, *there is a prime end of* γ *which contains* D.

Here, as in the development of Theorem 2, for each value of j the set $\Gamma = \sum \Gamma_{ji}$. Consequently $\sum \Gamma_{ji} \supset D$. If for each of these $\overline{c(\Gamma_{ji}) \cdot D} \supset D$, then the set $\sum \Gamma_{ji} \cdot D$ is nowhere dense in D and $[\Gamma_{ji}]$ does not cover D. But as none of $[\Gamma_{ji}]$ can have $\overline{c(\Gamma_{ji}) \cdot D} \not\supset D$ unless $D \cdot c(\Gamma_{ji}) = 0$, in view of Lemma 4, there must for every value of j be one of $[\Gamma_{ji}]$ which contains D. The proof now follows lines almost identical with those of Theorem 2.

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PROJECTIVE DIFFERENTIAL GEOMETRY OF CURVES

BY L. R. WILCOX

In a fundamental paper* on the projective differential geometry of curves, L. Berzolari obtained canonical expansions representing a curve C immersed in a linear space S_n in a neighborhood of one of its points P_0. The vertices of the coordinate simplex yielding Berzolari's canonical form are covariantly related to the curve, while the unit point may be any point of the rational normal curve Γ which osculates C at P_0. It is the purpose of the present paper to define a covariant point on Γ which can be chosen as a unit point so as to produce final canonicalization of the power series expansions of Berzolari.

It will be observed that the usual methods of defining a point on Γ for the cases $n=2$ and $n=3$ depend on configurations† that do not possess suitable analogs in n-space. Hence it appeared for some time that the problem called for different procedures in spaces of different dimensionality. Special devices

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* L. Berzolari, *Sugli invarianti differenziali proiettivi delle curve di un iperspazio*, Annali di Matematica, (2), vol. 26 (1897), pp. 1–58.

† E. P. Lane, *Projective Differential Geometry of Curves and Surfaces*, pp. 12–27.