1080-05-261 **Sandra Kingan*** (skingan@brooklyn.cuny.edu), Department of Mathematics, Brooklyn College, CUNY, 2900 Bedford Avenue, New York, NY 11210, and **Manoel Lemos** (manoel@dmat.ufpe.br), Departamento de Matematica, Universidade Federal de Pernambuco, Recife, Pernambuco 50740-540, Brazil. *Strong Splitter Theorem.*

We present a strengthening of the Splitter Theorem and some of its applications to excluded minor results. The Splitter Theorem states that, if N is a 3-connected proper minor of a 3-connected matroid M such that, if N is a wheel or whirl then M has no larger wheel or whirl, respectively, then there is a sequence $M_0, \ldots, M_n$ of 3-connected matroids with $M_0 \cong N$, $M_n = M$ and for $i \in \{1, \ldots, n\}$, M_i is a single-element extension or coextension of M_{i-1}. Observe that there is no condition on how many extensions may occur before a coextension must occur. We strengthen it, as a result of which we can obtain, up to isomorphism, M starting with N and at each step doing a 3-connected single-element extension or coextension, such that at most two consecutive single-element extensions occur in the sequence (unless the rank of the matroids involved are $r(M)$). Moreover, if two consecutive single-element extensions by elements $\{e, f\}$ are followed by a coextension by element g, then $\{e, f, g\}$ form a triad in the resulting matroid. (Received January 29, 2012)