1023-05-752 **Sean McGuinness***, Dept. of Mathematics, Dartmouth College, Hanover, NH 03755. *Ore-Type and Dirac-Type Theorems for Matroids.*

In this talk, we shall show that well-known theorems of Dirac and Ore concerning cycles through vertices in a graph can be extended to binary matroids having no F_7^*-minor. In one result, we show that for any collection $\mathcal{A}^*$ of cocircuits in a connected binary matroid M having no F_7^*-minor, there is a circuit intersecting all cocircuits of $\mathcal{A}^*$ if either one of two things hold:

(i) For any two disjoint cocircuits A_1^* and A_2^* in $\mathcal{A}^*$ it holds that $r^*(A_1^*) + r^*(A_2^*) > r^*(A_1^* \cup A_2^*)$.

(ii) For any two disjoint cocircuits A_1^* and A_2^* in $\mathcal{A}^*$ it holds that $r(A_1^*) + r(A_2^*) > r(M)$.

In a second result, we show that a theorem of Dirac for graphs can be extended to matroids by showing that for any k cocircuits of a k-connected binary matroid M having no F_7^*-minor, there is a circuit which intersects them.