Let \( d > 1 \) be a positive integer which is not a perfect square. Let \((x_n, y_n)_{n \geq 1}\) be the sequence of positive integer solutions \((x, y)\) of the Pell equations \(x^2 - dy^2 = \pm 1\). Let \(\{F_m\}_{m \geq 0}\) be the sequence of Fibonacci numbers. In this talk, we explain when can \(x_n\) be a product of two Fibonacci numbers, which then reduces to the study of Diophantine equation

\[ x_n \in \{F_mF_\ell\}. \quad (1) \]

We will show that the above equation has at most one solution \(n\) in positive integers, with a few exceptions in \(d\). Our proofs use the linear forms in logarithms of algebraic numbers. (Received September 26, 2017)