There are many interesting definitions of cycles and trees in hypergraphs. We call a sequence of distinct sets $E_1, \ldots, E_\ell$ and vertices $x_1, \ldots, x_\ell$ a Berge cycle of length $\ell$ if $x_i \in E_i$ and $x_i \in E_{i+1}$ (for $1 \leq i < \ell$) and $x_\ell \in E_1$ hold. We call it a loose cycle if the hyperedges have no triple intersection and $E_i \cap E_j \neq \emptyset$ implies $|i - j| = 1 \pmod{\ell}$. A loose cycle is $q$-tight if $|E_i \cap E_{i+1}| \leq q$ holds for consecutive pairs. The case $q = 1$ defines a linear cycle.

A sequence of distinct sets $E_1, \ldots, E_s$ is called a forest if for every edge $E_i$ with $2 \leq i \leq s$ there exists an $1 \leq \alpha(i) < i$ such that $E_\alpha$ is the root edge of $E_i$, i.e., $E_i \setminus E_\alpha$ is disjoint from $\bigcup_{j<i} E_j$.

After a brief review we discuss some properties of trees in hypergraphs (a joint work with Tao Jiang) and also discuss the minimum size of hypergraphs avoiding certain cycles thus improve some recent results of Győri et al.

Many problems remain open. (Received September 24, 2012)