

ON THE STRUCTURE OF THE ω -ENUMERATION DEGREES

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The structure of the ω -enumeration degrees (denoted by \mathcal{D}_ω) is obtained by introducing an uniform enumeration reducibility between sequences of length ω of sets of natural numbers. The so obtained structure is an upper semi-lattice lying somewhere between the upper semi-lattice of enumeration degrees and the lattice of Mućnik degrees ($\mathcal{D}_e \subsetneq \mathcal{D}_\omega \subsetneq \mathfrak{M}_\omega$).

This talk will have two main topics. First of all we shall study the global properties of \mathcal{D}_ω and how it is related to \mathcal{D}_e . Then we shall focus on the local theory (the theory of the degrees lying between the least element of \mathcal{D}_ω and its jump) giving particular attention to the high-low hierarchy.