Around symplectic capacities

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A symplectic capacity is a function which assigns to each symplectic manifold X a number c(X) in [0,\infty], satisfying conditions (in particular c(X)\leq c(U) if X symplectically embedds in U). It is used to obtain nontrivial obstructions to the existence of symplectic embeddings. A strong version of a conjecture of Viterbo asserts that all normalized symplectic capacities agree on convex domains. We prove this conjecture for monotone toric domains in dimension four, which include all dynamically convex toric domains. We shall also discuss the notion of "symplectic convexity" and another possible normalization of capacities.