

# RECENT PROGRESSES IN KAEHLER AND COMPLEX ALGEBRAIC GEOMETRY

CLAIRE VOISIN

We present recent progresses concerning the geometry of Kaehler compact manifolds.

- We shall explain the characterization of the Kaehler cone due to Demailly and Paun, and the characterization of the pseudoeffective cone (Boucksom, Demailly, Peternell, Paun) , which are major recent progresses in the study of the positivity properties of  $(1,1)$ -classes on Kaehler manifolds.

In a different direction, we shall explain important differences between Kaehler and projective geometry, discovered by the author:

- There is no way to extend the Hodge conjecture to Kaehler compact manifolds.

- There are Kaehler compact manifolds which do not have the homotopy type of projective complex manifolds.