New families of surfaces with canonical map of high degree

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By a celebrated result of A. Beauville, if the dimension of the image of the canonical map of a complex surface is two, then the image is either of genus zero or a canonical surface. In both cases the degree of the map is uniformely bounded from above.

Until a few years ago, very few examples of surfaces with canonical map of high degree were known.

Thanks to the work of some collegues, new examples have been obtained in recent years, opening up new research questions and perspectives.

In this seminar we will present a new method for constructing surfaces with canonical map of high degree and some new examples produced with this method.

Finally, we will discuss the contribution our examples make to the afore-mentioned issues.