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Dear conference organizers:

I would like to register a poster for the session "Admissible meshes for compact subset of  $\mathbb{R}^n$  which are not  $C^\infty$  determining."

**Admissible meshes for compact subset of  $\mathbb{R}^n$   
which are not  $C^\infty$  determining.**

Based on joint work with Agnieszka Kowalska

It is known that if  $K \subset \mathbb{C}^N$  admits a Markov inequality with exponent  $r$  then there exist admissible meshes  $(A(d))$  for  $K$  with  $\#A(d) = O(d^{2rN})$  as  $d \rightarrow \infty$  (see [1]). There are many algebraic subset of  $\mathbb{R}^N$  which are not  $C^\infty$  determining and have Bernstein's property. Such sets cannot have Markov's property, but some of them do have a strong generalized Markov property (see [2]). In this poster we give examples of admissible meshes (and weakly admissible meshes) for some sets which are not  $C^\infty$  determining, but have a strong generalized Markov property.

Thank you for your consideration!

Sincerely,  
Tomasz Beberok

REFERENCES

- [1] Calvi, J.-P., Levenberg, N.: Uniform approximation by discrete least squares polynomials. J. Approx. Th. 152(1), 82-100 (2008).
- [2] Baran, M., Kowalska, A.: Sets with the Bernstein and generalized Markov properties. Ann. Polon. Math. 111, 259-270 (2014).