

# SALZBURG MATHEMATICS COLLOQUIUM

Summer 2018

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## „Higher differentiability results in calculus of variations“

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### Abstract:

I will present some higher differentiability results for solutions to linear elliptic equations in divergence form

$$\operatorname{div}A(x, Du) = \operatorname{div}F.$$

We prove that some differentiability assumptions on  $F$  transfer to  $Du$  with no losses in the natural exponent of integrability, if the partial map  $x \rightarrow A(x, \cdot)$  is sufficiently regular.

Thursday, **15:00-15:45**

Hörsaal 414, 1. Stock