

## The $p(x)$ -Laplacian – Peter Hästö

In this talk I consider the  $p(x)$ -Laplace operator  $u \mapsto \operatorname{div}(|\nabla u|^{p(x)-2}\nabla u)$  and the almost corresponding energy integral

$$\int_{\Omega} |\nabla u(x)|^{p(x)} dx.$$

I will discuss some motivation for studying these and present results for existence and uniqueness of solutions to various problems related as well as results on the regularity of solutions. For more information on  $p(x)$  type problems and spaces confer

<http://mathstat.helsinki.fi/analysis/varsobgroup/>