
FLORIAN HERZIG, University of Toronto

On the p -adic Langlands program

The p -adic Langlands correspondence is a conjectural link between p -adic representations of $\mathrm{GL}(n)$ (or more general reductive groups) and p -adic Galois representations, generalising the classical Langlands correspondence. In the case $n = 2$ this is by now well-understood and has yielded some exciting arithmetic applications, whereas for $n > 2$ the situation has so far been much more mysterious. I want to give a gentle introduction to this subject, not assuming previous exposure to the Langlands program.