

FILTRATIONS OF ABSOLUTE GALOIS GROUPS AND VALUATIONS

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The absolute Galois group of a field encodes important arithmetical information about the field, such as its orderings and certain valuations. It turns out that this information is in fact encoded in much smaller canonical Galois groups, arising from standard filtrations of the absolute Galois group: the lower p -central filtration, and the Zassenhaus filtration. We describe these canonical Galois groups Galois-theoretically, arithmetically, and cohomologically.

The talk will be based on joint works with Jan Minac and Sunil Chebolu.