What are Coq's formal foundations?

Gallina, being an extension of the Calculus of Inductive Constructions (CIC), being an extension of the Calculus of

Constructions (CoC), being an extension of the typed lambda

calculus.

The strong normalization property guarantees what?

Every CIC program and proof term terminates.

The relative consistency property guarantees what?

CIC is *relatively consistent* with ZF so CIC claims are as believable as ZF ones.

What does the annotation Set mean on an Inductive definition?

It means that what's being defined is part of the object

language.

What are Coq's constituent languages?

- Gallina
- Ltac for queries and requests of CoqThe Vernacular a DSL for writing proofs and decision
- procedures

Interactively test a function by applying it.

