## About the Cover Four-color hypermaps

As Georges Gonthier says in his article on the formal proof of the Four-Color Theorem, planar graphs require extra data to encapsulate their planarity in a way that can be used in formal proofs. Hypermaps are what he uses to implement this idea. This as well as other aspects of Gonthier's proof illustrate one of the more remarkable features of formal proofs—that very often the task of making an ordinary proof into one rigorous enough to be checked by computer forces one to make even the original proof much clearer to human beings.

> -Bill Casselman, Graphics Editor (notices-covers@ams.org)

