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## Teichmüller space via Kuranishi families

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**Abstract.** In this partly expository note we construct Teichmüller space by patching together Kuranishi families. We also discuss the basic properties of Teichmüller space, and in particular show that our construction leads to simplifications in the proof of Teichmüller's theorem asserting that the genus  $g$  Teichmüller space is homeomorphic to a  $(6g - 6)$ -dimensional ball.

**Mathematics Subject Classification (2000):** 30F60 (primary); 14H15, 32G15, 14H10 (secondary).