

# Modular Invariance

---

*Source:* <http://sci.tech-archive.net/Archive/sci.physics.research/2006-02/msg00196.html>

---

- *From:* "S.M" <[smetalman2006@xxxxxxxxxx](mailto:smetalman2006@xxxxxxxxxx)>
  - *Date:* Mon, 13 Feb 2006 22:36:01 +0000 (UTC)
- 

I am confused about the significance of modular invariance in Conformal Field Theory. What do statements like "a good conformal theory, has to be modular invariant", really mean?

I understand that any CFT on the torus has to be modular invariant, to respect the discrete symmetries of the torus.

If the conformal field theory is defined on the plane, does it still need to be modular invariant to be a "good" theory? Why?

Thanks for any help,  
Marvin

.