

**ABSTRACT SUBMISSION FORM**Please fill out all sections of this form and return **by 11 June 2010** to:

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<u>Number of Authors</u>	6	<u>Number of Affiliations</u>	1
<u>Type of presentation</u>	Poster presentation <input checked="" type="checkbox"/>	Oral presentation <input type="checkbox"/>	
<u>Title of Contribution</u>	Designing of linear parabolic solar concentrator for TEG testing		
<u>Complete List of Authors</u>	Francesco Montagner, Stefano Boldrini, Simone Battiston, Stefania Fiameni, Simona Barison, Monica Fabrizio		
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<u>Abstract</u> (max 1500 characters)	<p>The possibility to convert the solar radiation into electricity and employable heat is attracting great attention on thermoelectric materials. DOE published some interesting data about the possibility of combining solar technology with thermoelectric generators (TEG) and the Priority Research Directions Document suggests this route to make competitive the solar radiation conversion technologies with fossil fuel ones. Linear parabolic concentrators ("on-axis") are the most suitable disposals because they exhibit the highest optical efficiency to convert solar radiation into available heat. It can provide high temperature by concentration of solar radiation in a small surface. Moreover, the temperature and the heat flow can be controlled easily by the dimension of the concentrator and his orientation.</p> <p>In this presentation a prototype in laboratOJY scale will be showed, designed in the lab to test our TEG modules for application in solar concentration systems. The disposal was designed with a "super reflective" aluminum linear parabolic mirror, a collector for the hot side, a water cooled cold side and an electronic control system to measure the thermal end electric parameters.</p> <p>Preliminary results obtained with comemrcial TEG modules will be presented and discussed.</p>		
<u>References (optional)</u>			

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