

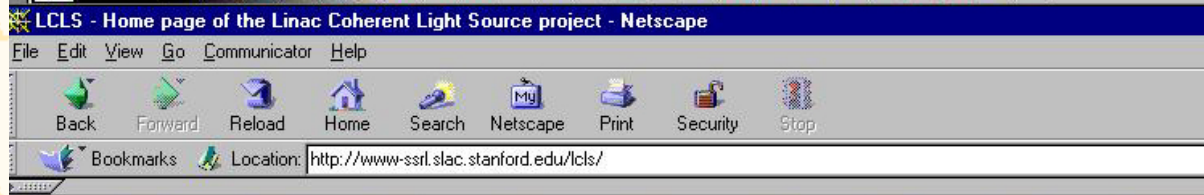
## Status of the



## Conceptual Design Report

**L. Klaisner  
V. Bharadwaj  
H-D. Nuhn**

# LCLS LINAC COHERENT LIGHT SOURCE



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**Linac Coherent Light Source**

LCLS

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## Description

The LCLS is a [multi-institutional](#) proposal for a single-pass x-ray Free Electron Laser (FEL) operating in the 1-15 Å wavelength region, using electron beams from the [SLAC linac](#) at energies up to 15 GeV.

The proposal received a strong recommendation in the [Report of the Basic Energy Sciences Advisory Committee Panel on Novel Coherent Light Sources](#):

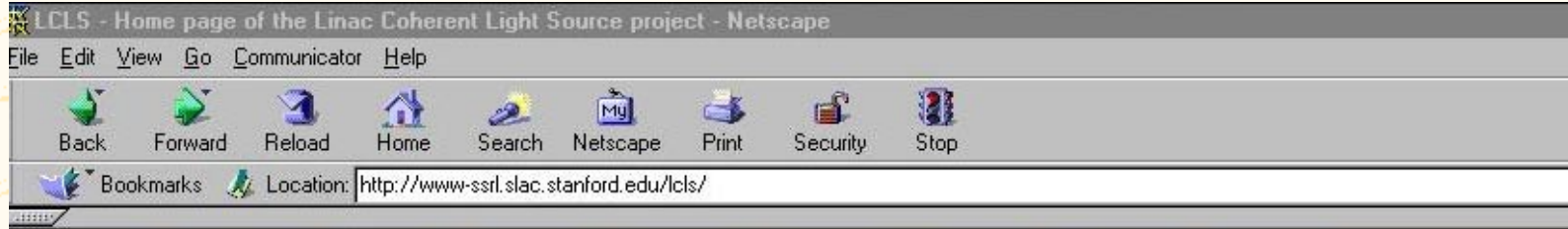
"... Fourth (4th) generation sources, which would involve a higher degree of coherence, and potentially higher power, brilliance, and ultrashort pulses, possibly at very short wavelengths, such as the hard X-ray region, would offer a further major advance in scientific capabilities. Such sources, probably based on free electron laser (FEL) concepts, provide a very appealing basis for the future development of light-source user facilities, for which there is an extensive user community. ...."

**LCLS Home Page**

<http://www-ssrl.slac.stanford.edu/lcls/>

The LCLS TAC, 12/01

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## LCLS Draft CDR (password protected)

[http://www-ssrl.slac.stanford.edu/lcls/cdr\\_draft/](http://www-ssrl.slac.stanford.edu/lcls/cdr_draft/)



# LCLS LINAC COHERENT LIGHT SOURCE



## 15 GeV Electrons **LCLS** 1.5 Å X-Ray Linac Coherent Light Source

### LCLS CDR Draft

This Web page contains drafts of the LCLS CDR that have been approved for general circulation. We expect that there are mistakes, omissions and possibly incorrect attributions. We are very interested in correcting these before the final publication of the LCLS CDR.

The LCLS CDR Editorial Committee would appreciate your comments, suggestions, corrections and improvements to the documents.

Please send any contribution that you may have to the Editorial Committee at [lclscdr@ssrl.slac.stanford.edu](mailto:lclscdr@ssrl.slac.stanford.edu)

Note: The report chapters are formatted in the Adobe Portable Document Format (PDF). The PDF reader can be [downloaded](#) from Adobe's WEB Site free of charge.



### LCLS CDR

<http://www-ssrl.slac.stanford.edu/lcls/CDR/>

## **Issues**

- **Realignment of the Injector**
- **Linac Chicanes**
- **Location of the Near Hall**
- **Change in Scope**
  - ➔ **Chapter 3 – Scientific Experiments**
  - ➔ **Chapter 9 – Xray Optics**