Abstract Submitted
for the APR10 Meeting of
The American Physical Society

SESAME-A 3rd Generation Synchrotron Light Source for the Middle East[1] HERMAN WINICK, SLAC National Accelerator Laboratory — Developed under the auspices of UNESCO and modeled on CERN, SESAME (Synchrotron-light for Experimental Science and Applications in the Middle East) is an international research center in construction in Jordan. It will enable world class research by scientists from the region, reversing the brain drain. It will also build bridges between diverse societies, contributing to a culture of peace through international cooperation in science. The centerpiece is a synchrotron light source originating from BESSY I, a gift by Germany. The upgraded machine, a 2.5 GeV 3rd Generation Light Source (133m circumference, 26nm-rad emittance and 12 places for insertion devices), will provide light from infra-red to hard X-rays, offering excellent opportunities to train local scientists and attract those working abroad to return. The SESAME Council meets twice each year and presently has nine Members (Bahrain, Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, Palestinian Authority, Turkey). Members have responsibility for the project and provide the annual operations budget (1.5M US dollars in 2009, expected to rise to about 5M when operation starts in 2012-13). Jordan provided the site, building, and infrastructure. A staff of 20 is installing the 0.8 GeV BESSY I injection system. The facility will have the capacity to serve 30 or more experiments operating simultaneously. See www.sesame.org.jo

[1]DOE Office of Science

Herman Winick
SLAC National Accelerator Laboratory

Date submitted: 30 Sep 2009 Electronic form version 1.4