LOI Database

#	Date Received	Title	Discipline	Principal Investigator	Lead Institution
1	11/21/05	Time Dependent Deformation	Rock Mechanics	Dr. W.G. Pariseau	Uni. Of Utah
2	11/21/05	Scale Effects In Rock Mechanics	Rock Mechanics	Dr. W.G. Pariseau	Uni. Of Utah
3	11/21/05	Stress & Rock Properties of the Yates member of the Poorman Formation	Rock Mechanics	Dr. W.G. Pariseau	Uni. Of Utah
4	11/22/05	Mine Engineering & Management Related Activities	Mining	Dr. Gautam Pillay	SDSMT
5	11/23/05	DUSEL Education & Conference Center	Education & Outreach	Dr. Larry D. Stetler	SDSMT
6	12/2/05	Determination of Water Levels & Stress Release during Dewatering	Geology	Dr. Larry D. Stetler	SDSMT
7	12/2/05	Search for Neutron-Antineutron Transition at Homestake	Physics	Dr. Yuri Kamyshkov	Uni. Of Tennessee, Knoxville
8	12/6/05	Plan for Near Future of High Energy Neutrino Physics at Homestake	Physics	Dr. Al Mann	Uni. Of Pennsylvania
9	12/8/05	Hard Rock Underground Mine Mapping & Surveying	Geology	Dr. Diane Wolfgram	Montana Tech
10	12/8/05	Partitioning of CO2, H2O, gold and trace metals between synformal and antiformal fold hinges	Geology	Dr. Diane Wolfgram	Montana Tech
11	12/8/05	Developing an Internet-accessible database of 3D geologic and engineering data	Geology	Maribeth Price	SDSMT
12	12/8/05	Hydrologic Instrumentation of the Homestake DUSEL	Geology	Dr. Arden Davis	SDSMT
13	12/9/05	New Paradigms in Sensing	Engineering	Dr. Steven Glaser	Uni. Of California - Berkeley
14	12/9/05	Effects of Ultralow Radiation Levels on Human Cells	Microbiology	Dr. Betsey Sutherland	Brookhaven National Laboratory
15	12/9/05	Microbial Evolution	Microbiology	Dr. Susan M. Pfiffner	Uni. Of Tennessee, Knoxville
16	12/9/05	Workshops	Education & Outreach	Dr. Susan M. Pfiffner	Uni. Of Tennessee, Knoxville
17	12/1/05	Effects of Cosmic Rays on the Soft Error Rate of Semiconductor Memory Chips at Ground Level	Engineering	Dr. Li Chen	SDSMT
18	12/2/05	Controls on World-Class Homestake Gold Mineralization	Geology	Dr. Colin Paterson	SDSMT
19	12/8/05	Low Radioactivity Measurement Laboratory	Low Backg. Counting	Dr. Ila Pillalamarri	MIT
20	12/9/05	Role of Iron Formations in the Making of Giant Gold Deposits	Geology	Dr. Nuri Uzunlar	SDSMT
21	12/9/05	Thermal History of Homestake Mine	Geology	Dr. Nuri Uzunlar	SDSMT
22	12/9/05	Super CDMS	Physics	Dr. Dan Akerib	Case Western
23	12/9/05	Determination of Diurnal changes in the rotation rate of the earth	Physics	Dr. Gautam Pillay	SDSMT
24	12/9/05	Establishing the Physical Footprint for Future Geoscience Research at DUSEL	Geology	Dr. Larry D. Stetler	SDSMT
25	12/9/05	Developing of a robotic sampler for underground and confined environments	Engineering	Dr. Gautam Pillay	SDSMT
26	12/10/05	Homestake Electrical Engineering Laboratory (HEEL)	Physics	Dr. Robert McTaggert	SDSU
27	12/10/05	Homestake Outreach Program (HOP)	Education & Outreach	Dr. Matthew Miller	SDSU
28	12/10/05	Bioprospecting	Microbiology	Dr. Bruce Bleakley	SDSU
29	12/10/05	Analysis of soil-like materials in the mine	Geology	Dr. Bruce Bleakley	SDSU
30	12/10/05	Biological effect of low levels of radiation-Health Physics	Microbiology	Dr. Robert McTaggert	SDSU
31	12/10/05	Homestake Neutrinos	Offer to Collaborate	Dr. Robert McTaggert	SDSU
32	12/10/05	Establishing baseline data for microbial populations of the mine before and after dewatering	Microbiology	Dr. Bruce Bleakley	SDSU
33	12/12/05	Cloud physics facility and experiments for an underground laboratory	Atmospheric sciences	Dr. John Helsdon	SDSMT
34	12/11/05	Fracture network characterization at Homestake	Rock Mechanics	Dr. Matthew Mauldon	Virginia Tech
35	12/11/05	Risk Assessment of underground space modifications at Homestake	Rock Mechanics	Dr. Matthew Mauldon	Virginia Tech
36	12/11/05	Hydrogeology Collaboration on flow path delineation and modification	Earth Sciences	Dr. Joseph Wang	LBNL
37	12/11/05	Geochemistry collab. for the geochemical evolution of fluids in the Homestake hydrologic system	Earth Sciences	Dr. Joseph Wang	LBNL
38	12/11/05	Ecology/geomicrobiology collaboration for microbe evolution	Earth Sciences	Dr. Joseph Wang	LBNL
39	12/11/05	Geophysics collaboration for imaging	Earth Sciences	Dr. Joseph Wang	LBNL
40	12/11/05	Rock Mechanics and geoengineering collaboration for excavation research	Earth Sciences	Dr. Joseph Wang	LBNL
41	12/11/05	Couple process collaboration for large block experiments	Earth Sciences	Dr. Joseph Wang	LBNL
42	12/11/05	Cosmic ray studies	Earth Sciences	Dr. Joseph Wang	LBNL
43	12/12/05	Characterization and mechanics of faulting and rock fracture at homestake mine	Rock Mechanics	Dr. Stephen Martel	University of Hawaii
44	12/12/05	Breccia evolution associate with degassing of tertiary veins and dikes at Homestake	Geology	Dr. Alvis Lisenbee	SDSMT
45	12/12/05	Development of a 3D geological model of the Homestake mine area	Geology	Dr. Dean Peterson	Uni. Of Minnesota - Duluth
46	12/12/05	Detailed geological mapping of the Homestake mine area	Geology	Dr. Dean Peterson	Uni. Of Minnesota - Duluth
47	12/12/05	Close range remote sensing for mapping of rock in underground excavations	Geology	Dr. Joseph Dove	Virginia Tech
48	12/12/05	ZEPLIN - a multi ton scale liquid xenon dark matter direct search program	Physics	Dr. Hanguo Wang	UCLA
49	12/12/05	EXO - the enriched xenon observatory for neutrino-less double-beta decay	Physics	Dr. Giorgio Gratta	Stanford
50	12/12/05	Educational outreach support infrastructure	Education & Outreach	Dr. Omar El-Gayar	Dakota State University
51	12/12/05	Low-alpha lead and the cosmic-ray equivalency factor	Physics	Dr. Glenn I. Lykken	Uni. Of North Dakota
52	12/12/05	Study of a LANNDD of 100kTon at Homestake DUSEL	Physics	Dr. David B. Cline	UCLA
53	12/13/05	Investigation of microbial diversity in subsurface ecosystems	Microbiology	Dr. Sookie S. Bang	SDSMT
54	12/13/05	Initial low background counting facilities for Homestake	Physics	Dr. Kevin Lesko	LBNL
55	12/14/05	Large block (Pillar) test to study the failure of rock - rock strength and earthquake mechanics	Rock Mechanics	Dr. Derek Elsworth	Penn State

LOI Database

#	Date Received	Title	Discipline	Principal Investigator	Lead Institution
56	12/14/05	Mini-CLEAN	Physics	Dr. Daniel N. McKinsey	Yale
57	12/14/05	Understanding the complxities of long term data storage in space exploration	Data storage	Dr. William Figg	Dakota State University
58	12/14/05	R&D and physics with a 9m3 gaseous time projection chamber	Physics	Dr. Giovanni Bonvicini	Wayne State Uni., Detroit, MI
59	12/15/05	XENON100/1000	Physics	Dr. Richard Gaitskell	Brown University
60	12/16/05	Long term seismic and seismologic monitoring of stress and fluid dynamics in the upper crust	Earth Sciences	Dr. Serge A. Shapiro	Freie Universitaet Berlin
61	12/21/05	The Majorana Neutrinoless Double Beta-Decay Experiment	Physics	Dr. John Wilkerson	University of Washington
62	12/9/05	Deep fracture mapping at DUSEL using acounstic techniques	Geology	Dr. Gautam Pillay	SDSMT
63	12/16/05	Directional recoil identification from Tracks (Drift)	Physics	Dr. Dan Snowden-Ifft	Occidental College
64	12/22/05	High-current ion accelerator	Physics	Dr. Paul Vetter	LBNL
65	1/5/06	Coupled mechanical-hydrological behavior of fractured rock mass	Geology	Dr. Herb Wang	Uni. Of Wisconsin
66	1/9/06	Center for risk, the community and the environment	Education & Outreach	Dr. Peter Young	The RedWater Group
67	1/9/06	Rock bolt research, backfill testing, large diameter excavation research	Rock Mechanics	Dr. R.L. McNearny	Montana Tech
68	1/12/06	Crustal assimilation of volatile evolution in rhyolite and phonolite dikes	Geology	Dr. Genet Duke	Dr Genet Duke Collaboration
69	1/15/06	Low energy neutrino spectrometer	Physics	Dr. Raju Raghavan	Virginia Tech
70	1/20/06	Microbiological cultivation, community metagnomics, nanogeoscience, and stable isotope analysis	Microbiology	Dr. Eric Roden	Uni. Of Wisconsin
71	1/27/06	A Geoneutrino experiment at Homestake	Physics	Dr. Nikolai Tolich	LBNL
72	1/27/06	SIGN - A high-pressure, gaseous-neon-based Dark Matter Detector	Physics	Dr. James T. White	Texas A & M University
73	1/30/06	A longitudinal study of the health of homestke lab personnel exposed to the 4850 environment	Medicine	Dr. Jeffrey A Henderson	BH Center Amer. Indian Health
74	1/30/06	Surface facility planning and design for the Homestake Mine	Education & Outreach	Dr. Jennifer Karlin	SDSMT
75	2/10/06	Impact of subsurface microbial activity on the physical and chemical propeties of geological form.	Microbiology	Dr. T. C. Onstott	Princeton University
76	2/10/06	Large scale vs. small scale tranport of microorganisms and multi-phase CHO fluids	Microbiology	Dr. T. C. Onstott	Princeton University
77	2/10/06	Impact of subsurface microbial activity on the corrosion and deterioration of metallic infrastructure	Microbiology	Dr. T. C. Onstott	Princeton University
78	2/10/06	Deep Coupled Process Laboratory	Microbiology	Dr. Tommy Phelps	Oakridge National Laboratory
79	2/10/06	Ecosystem biochemistry transistioning from Near-Surface to Deep Earth Ecosystems	Microbiology	Dr. Tommy Phelps	Oakridge National Laboratory
80	2/10/06	Limits of life in the biosphere	Microbiology	Dr. Tom Kieft	New Mexico Tech
81	2/14/06	Evolution of Autotrophy	Microbiology	Dr. Bruce Bleakley	SDSU
82					