

**U. S. DEPARTMENT OF ENERGY
FIELD WORK PROPOSAL**

1. WORK PROPOSAL NO.: <p align="center">2446.2</p>	2. REVISION NO.:	3. DATE PREPARED: <p align="center">03-15-07</p>	3a. CONTRACTOR NO.: <p align="center">53209</p>
4. WORK PROPOSAL TITLE: AUGER - Airfly Experiment			
5. BUDGET & REPORTING CODE: KA-13-11-01-02	6. WORK PROPOSAL TERM: Begin: End:	7. IS THIS WORK PACKAGE INCLUDED IN THE INST. PLAN? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	7a. PRINCIPAL INVESTIGATORS: Kuhlmann, S.
8. HEADQUARTERS/OPERATIONS OFC PROGRAM MANAGER: Staffin, R. No. 301-903-3624	11. HEADQUARTERS ORGANIZATION: High Energy Physics		14. DOE ORG. CODE: SC
9. DOE FIELD ORGANIZATION WORK PROPOSAL REVIEWER:	12. DOE FIELD ORGANIZATION: Chicago		15. DOE ORG. CODE: CH
10. CONTRACTOR WORK PROPOSAL MANAGER: Weerts, H.J. No. 630-252-8831	13. CONTRACTOR NAME: UChicago Argonne, LLC		16. CODE: 12
17. IS THIS PROPOSAL TO DO WORK THAT INCLUDES A SECURITY INTEREST? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
18. WORK PROPOSAL DESCRIPTION (Approach, anticipated benefit in 200 words or less): <p style="margin-left: 40px;">The Airfly experiment is an international effort to measure the amount of fluorescence light emitted by air when a beam of electrons passes by. It is important to know this for high energy cosmic ray measurements which use fluorescence light to estimate the energy of the cosmic ray. Argonne is unique in that it has three accelerators that are quite useful for these calibrations. Data have been taken in the HEP, CHM, and APS divisions at Argonne; five HEP staff members are involved in the experiment. We expect to publish between five and ten scientific journal articles on these measurements. The AUGER - Airfly Experiment is described under the submission for B&R KA-11 (ANL Account 53206).</p>			
19. CONTRACTOR WORK PROPOSAL MANAGER: <p align="center"><i>H. Weerts</i></p>		20. OPERATIONS OFFICE REVIEW OFFICIAL: 	
<hr/> SIGNATURE	<hr/> DATE <p align="center">03-15-07</p>	<hr/> SIGNATURE	<hr/> DATE <p align="center">03-15-07</p>
21. DETAIL ATTACHMENTS: (See specific attachments.)			
<input type="checkbox"/> a. Facility requirements	<input checked="" type="checkbox"/> e. Approach	<input type="checkbox"/> i. NEPA requirements	<input type="checkbox"/> m. ES&H considerations
<input type="checkbox"/> b. Publications	<input checked="" type="checkbox"/> f. Technical progress	<input checked="" type="checkbox"/> j. Milestones	<input type="checkbox"/> n. Human/Animal Subjects
<input checked="" type="checkbox"/> c. Purpose (mandatory)	<input checked="" type="checkbox"/> g. Future accomplishments	<input type="checkbox"/> k. Deliverables	<input type="checkbox"/> o. Security requirements
<input type="checkbox"/> d. Background	<input checked="" type="checkbox"/> h. Relationships to other projects	<input type="checkbox"/> l. Performance Measures/Expectations	<input checked="" type="checkbox"/> p. Other (specify)

**WORK PROPOSAL REQUIREMENTS FOR OPERATING/EQUIPMENT
OBLIGATIONS AND COST**

CONTRACTOR NAME UChicago Argonne, LLC		WORK PROPOSAL NO. 2446.2		REVISION NO.		CONTRACTOR NO. 53209		DATE PREPARED 01/31/2007	
21. STAFFING (in staff years)		PRIOR YEARS	FY2007	FY2008	FY2009		FY2010	FY2011	TOTAL TO COMPLETE
				ESTIMATE	REQUEST	AUTHORIZED			
a. Scientific			0.2	0.0	0.0		0.0	0.0	
b. Other Direct			0.0	0.0	0.0		0.0	0.0	
c. Technical Services*			0.0	0.0	0.0		0.0	0.0	
d. Total Direct			0.2	0.0	0.0		0.0	0.0	
23. OBLIGATIONS AND COSTS (in thousands)									
a. Total Obligations			90	0	0		0	0	
b. Total Costs			90	0	0		0	0	
24. EQUIPMENT (in thousands)									
a. Equipment Obligations			0	0	0		0	0	
b. Equipment Costs			0	0	0		0	0	
25. MILESTONE SCHEDULE (Tasks)		FY2009 DOLLARS				PROPOSED SCHEDULE		AUTHORIZED SCHEDULE	
		PROPOSED		AUTHORIZED					
26. REPORTING REQUIREMENTS									

* Technical services staffing includes ANL support divisions' scientific effort.