COSMIC RAY DETECTOR AGREEMENT

between

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(TEACHER)

and

QUARKNET

QuarkNet provides cosmic ray detectors to member teachers to encourage research in particle physics. The detector belongs to QuarkNet and must be returned in a timely manner should a teacher disengage from educational use of the detector. If a teacher moves to a new school, the detector travels to the new school assuming the teacher continues in QuarkNet.

This Agreement is effective (date) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ between:

(print teacher name) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, (print mentor name) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and QuarkNet. In order to support student inquiry, the parties mutually agree as follows:

QuarkNet staff will:

1. Provide a detector for use by the teacher and his/her students for cosmic ray research.

2. Maintain the Cosmic Ray e-Lab for data upload, analysis and communication.

3. Create a teacher account on the e-Lab.

4. Provide consulting and hardware troubleshooting, phone support and expertise.

QuarkNet mentor(s) will:

1. Support the teacher and his/her students as a source of science content and assistance with hardware issues.
2. Coordinate QuarkNet Center gatherings and activities for the purpose of furthering collaborative learning about particle physics and cosmic rays.

QuarkNet teacher will:

1. Make a concerted effort to have the detector turned on and recording data.

2. Solve building infrastructure problems. This can include locating the detector and GPS, providing a data computer, and enabling student computer access to the e-Lab.

3. Respond quickly to hardware faults and power outages to return detector to operating state.

4. Attempt troubleshooting with students on detector and e-Lab problems before approaching mentor or QuarkNet staff.

5. Make frequent and timely data uploads to the e-Lab: Data in the e-Lab are data for all. (Alternate uploads are welcome, but the data must reside in the QuarkNet e-Lab portal first.) Uploads are encouraged with student involvement and responsibility.

6. Make a good faith attempt to engage students in using the detector. This includes direct student use of the cosmic ray detector hardware and the e-Lab.

1. Monitor his/her student online entries for appropriate content.
2. Update the QuarkNet information database with any status change of school, address, phone number or e-mail address.

The parties hereto have caused this Agreement to be executed (sign below).

FOR QUARKNET: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_

MENTOR(S): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_

TEACHER: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_

SCHOOL: (print) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

CITY / STATE / ZIP: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PHONE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ EMAIL:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_