

Meadville Area Senior High School

Pulsar Search Collaboratory Club

Club Advisor: Thaddeus Weber, MASH Physics Teacher

Mission statement:

The Meadville Area Senior High School welcomes all students to join the Meadville Pulsar Search Collaboratory Club (Club). The Club is created in conjunction with the Pulsar Search Collaboratory (PSC) created by West Virginia University (WVU). As a member of the Club, the students will have the opportunity to perform actual research and analysis of data provided by WVU to try to locate pulsars in the universe. Moreover, WVU offers the opportunity for students to receive college credit who follow WVU's requirements, found at http://pulsarsearchcollaboratory.com/wp-content/uploads/2018/07/PSC_syllabus.2018.pdf.

As further information pertaining to the Club, the following is copied from WVU's PSC website:

The PSC began in 2007 when the Green Bank Telescope was in need of repairs. Specifically, it needed a new track. While this track was being replaced, the telescope was unable to move and could only point at a fixed position in the sky. During this time, two astronomers from WVU, Dr. Maura McLaughlin and Dr. Duncan Lorimer used the Green Bank Telescope to observe the sky as it drifted overhead. And as the sky drifted by, they took data. And more data. And more data. By the end, they had over 300 hours of observing time and acquired more than 30 terabytes of data! We formed the PSC to help them analyze this data, and as it turns out students and teachers are quite good at it! Students have actually discovered several new pulsars, and have become published authors, before they leave high school!

(<http://pulsarsearchcollaboratory.com/home/about/>)

To participate, all PSC students must be 13 years old or older and be sponsored by a teacher. PSC students complete a training course to become certified to gain access to GBt data. It is not mandatory that teachers participate in PSC training, but it is highly encouraged. At a minimum we do expect teachers to gain permission from your school to participate in the PSC, to activate you once you register, to collect consent forms, and to keep an eye on your progress. Ask your teacher to complete the application!

(<http://pulsarsearchcollaboratory.com/for-students/>)

Membership:

1. To be a member in good standing, a student will be required to complete the PSC on-line training, found at <http://pulsarsearchcollaboratory.com/online-workshop/>, within 10 weeks of becoming a member. As a reference, the training found at the aforementioned website presents a seven-week recommended schedule.
2. The Club will meet weekly after school and will be open to all high school students in Crawford Central School District.
3. The Club will elect officers in May of each year. All current members will be allowed to vote for officers for the following school year. Any ninth through eleventh grade student who has completed the training required by the WVU PSC is eligible to be an officer. If the office of president is vacated before elections, the vice-president will become president. If any other office is vacated, the Club Advisor can appoint a new officer. That new officer will serve until the next election.

4. The Club will have the following offices:

President - collaborates with other officers to plan and run meetings and events

Vice-President - helps President, maintains all internal communication (announcements, meeting reminders)

Treasurer - maintains all financial records (withdrawals, deposits, ledger)