UNIVERSITIES

Moderation at Boulder

from a Special Correspondent

Boulder, Colorado

A NEW moderate trend is discernible among protesting students. This has been particularly well exemplified on Colorado campuses in the past week. During an "official" two day strike at the 20,000 strong university of Colorado at Boulder, the university's president, Dr Frederick Chieme, was given an ovation when he addressed a rally packed by half the university population (10,000). The students were calling for a complete shutdown of courses for the rest of the term. The object apparently is to conduct house to house teachings of the uncommitted "civilian" community. The president proclaimed that he was "bitterly opposed" to the war in Vietnam and for this reason was against closing the university "so that we can make our voices heard".

The moderation of the manifestations, despite the undoubted strength of student feeling there can, in part be attributed to the wise handling of the crisis. The university has a famous sociology department, and the departmental head, Professor Howard Higman, is chairman of the staff executive committee and vice-chairman of the university's governing body. An analysis of options open to the university government showed seven possibilities, ranging from severe penalties for students missing class to total capitulation—that is, shutdown of the campus.

The committee has set its face against bringing in the police, much less the National Guard, under almost any circumstances. After lengthy debate, the council voted 33 to 5 for "business as usual", with a lenient line on grading those who do not attend classes. This week will show what the student response is. Some face loss of degrees if they are not graded or examined this term, which ends anyway in three weeks' time. At other nearby institutions, moderate students have been physically interposing themselves between the authorities and extreme groups bent on violence. A line of passive defenders of their own people has in some cases been enough to turn back student wreckers.

Midweek, there was a much smaller turn out of striking students in Denver itself. A demonstration only a few hundred strong halfmasted the stars and stripes on Capitol Hill and tucked a red flag under the arm of the Union soldier on the Civil War memorial in front of the Capitol building. There was almost a holiday mood about the affair. There was also an air of family picnic prevailing at the start of the massive and highly organized Saturday rally on Capitol Hill. A march of up to eight or nine thousand students passed off without incident, largely due to excellent marshalling by student organizers themselves. They meticulously observed the police regulations for the march that demonstrators should keep the sidewalks clear. Legal marshals from Denver Law School mingled with the marchers and on Capitol Hill (where the crowd reached 12,000) to maintain discipline and to advise. A briefing prepared by the law school marshals and circulated in advance clearly set out to the demonstrators their rights and obligations and what to do if "busted". "If tear gas is used—don't rub your eyes," it concluded. A contingent of 200 medical students, both girls and boys, provided volunteer Red

Cross units equipped with walkie talkies and placed at strategic points as much to set an example and head off trouble as to mop up casualties afterwards. There were none. The speakers' microphone at the Capitol was briefly taken over to preach revolution but was soon returned to the hands of the organizers. The police actually supervised the lowering of the national flag as the acting governor (Hogan) had given permission for this. Four objectors were put aside. The only arrest occurred after the scheduled meeting was over when extremists picketed the police station and refused to move from a busy street crossing where they stayed on and staged a sitdown in the road.

CANADIAN ASTRONOMY

Boost for New Institute

THE new Interdepartmental Institute of Astronomy and Space Science at the University of British Columbia, Vancouver, has been given a good start by the National Research Council of Canada in the form of a grant of \$538,600. The intention is that the institute should work closely with the Astrophysics Branch of the Radio and Electrical Engineering Division of the National Research Council. This should give the institute easy access to the two major observatories in British Columbia—the Dominion Astrophysical Observatory at Victoria, and the Dominion Radio Astrophysical Observatory at Penticton—which are managed by the Astrophysics Branch.

It seems that the Vancouver institute will specialize in radio astronomy at centimetre wavelengths and less, and in plasma physics. Radio astronomy at short wavelengths is hampered by the presence of water vapour, but there are sites in Western Canada which ought to be suitable because of their height and the coldness of the atmosphere. One of the projects is to develop a 15 foot dish aerial which has an accurate enough surface to work at wavelengths of a few millimetres. The intention here, of course, is to break into the new branch of radio astronomy which deals with the detection of molecules in interstellar clouds by the short wavelength radio waves that the molecules emit. This work will be under the direction of Dr W. L. H. Shuter, associate professor in the Department of Physics. Shorter wavelengths in the no-man's-land where radio and infrared wavelengths merge will be the responsibility of Dr M. W. Ovenden, professor of astronomy in the Department of Geophysics, and part of the effort here will be in developing more efficient detectors.

The third area which will be dealt with at the new institute, plasma physics, is to be covered by Professor R. Nodwell of the Department of Physics.

The grant comes under an NRC scheme to encourage new, and especially interdisciplinary, research centres. Spread over three years the grant will be \$315,800 in 1970–71, \$144,800 in 1971–72 and \$78,000 in 1972–73.