INTERVIEW WITH PROFESSOR MAX DRESDEN PROFESSOR OF PHYSICS

AUGUST 24, 1987

Interviewee: Interview with Max Dresden, Professor of Physics, August 24, 1987, in my office in the Library.

Dresden: When I came in the fall of 1964, I came as a Full Professor in the Department of Physics, and I had been offered a position here before, but I didn't take it and I came back and did take it.

Interviewee: Where did you come from?

Interviewee: Was Van Allen Chairman at the time.

Van Allen was Chairman and there was nothing wrong with Van Allen. Van Allen had a very fine enterprise and very well. They also had a very strong theory group about 4 or 5 persons and for a series of non-.....reasons, they all left, so I was really the last theorist in that department and so I thought may be I should also......one went back to Switzerland, one person went to......, another person wanted to be in a laboratory, so it was nothing dramatic; it was in no way a reflection on Van Allen, he was most kind

and very helpful. In fact, the interesting thing was the reason I didn't come the first time it was offered to me was I would try to make it in Iowa. What happened then was the plane that used to stop in Chicago for trans-continental flights stopped. They went right across so nobody came any more to Iowa City. The railroad no longer functioned. There was no way of coming there and never mind getting people to come to be a faculty member; they couldn't even get them to stop, so that's what was actually instrumentalin deciding to really leave. I thought Stony Brook was new and had great excitement; it seemed to have great promise.

Interviewee: That was before John Toll came?

That was before John Toll came and before Yang. It was in **Dresden:** 1963 and I didn't come in 1964 and when I did come I talked to Alec Pond. It was right after I talked to Alec Pond, in fact, let me mention I spoke about the possibility that.....professorship which was given by Foundation for Science and Technology, in fact I talked to Alec Pond, who was the chairman......Alec Pond, I remember said something about Yang to come. In fact, I said, let me talk to him, it took a long time. By that time already it was known that by the time we went to Princeton to see him, it was known that John Toll was going to come here.....and I'll tell you this because you don't know this, I went to Yang's office, Yang had been old friend and I had known him for many years and I went to his office. He asked me a great deal about Stony Brook, he asked me how....... then he asked me if Stony Brook had an Einstein Professorship. And at that time I said why don't you wait a moment. So then I remember I went to a telephone, and I called up John Toll and I told him, "Johnny, I think if Stony Brook has an Einstein Chair, Yang will come." And I remember Toll's answer precisely, he said, "If you get Yang, I'll get the Chair." So then I went back to Yang and he

took maybe only about half an hour; I went back, I said, "Yes, I think we're going to get an Einstein Chair.".....That was all there was to it, at that time, things were evolving and there was a great deal of excitement......So when I came, and you, of course, were here, I had the feeling of great movement, things were happening, you could get things done. Also, the fact that everybody knew everybody, I think was enormously useful. I could go to you and say, "Karl, I have a problem." Any you might or might not be able to do something, but you knew what I was about and the same with Alec Pond. And I also remember back in the Master Plan that there was the possibility to have an institute associated with the state system altogether, with Albany. I remember there was a meeting, I remember it distinctly, with Sam Gould and there was Stanley Ross and I don't know whether you were there, but there were several people there. We had a meeting and Stanley Ross proposed an institute at that time that was a Colonial Institute but......no longer use the name that became an institute for Latin American Studies. And I at that time proposed the institute should.....and in fact shortly thereafter I actually wrote a program proposal which was then okayed and in fact when Yang came as Director of the Institute, I became its Executive Officer and that all started in '66. So, I would think all of that in terms of Physics, and that's what I know about most, we did spectacularly well. Not only did we have Yang, but we also got Van Lear, who was a major person and Van Leech who was here and postdirector of institute at Fermi Lab.....in the Fermi Lab later on Associate Director at Los Alamos. So the truth is, we did very well. So I would think in this short period which was roughly from '64 to '68, I think, the great hopes and the great expectations were very heavily realized. What happened after that, things changed rather radically and I think it started after I came back from a year in Europe and that was related to the fact that the whole student situation all

over the world and all through the country became very difficult with regard to the Vietnam War, there were very heavy drug problems. I went to Europe the same day the drug bust was here, I only saw it in the Herald Tribune in Europe. Although when I came back things were not better and in fact right after that I remember I came that was in September, there was the "Three Days." The three days when everything was stopped and there were full lectures given at the three days, it was organized by Sid Gelber, that was, I forgot the student, but I know that the two keynote faculty members were Ed Pellegrino and myself, and a committee of twelve, 6 faculty and 6 students were appointed, and that really changed my personal association very heavily. It changed it because I had been involved, and of course primarily in the teaching and in the research, and in building that up, and from then for really a long period I would easily from '69 until about '75 or '76, I was very heavily involved in almost all aspects of administration and have been on every committee that have all functioned from wasit really cut very heavily into my research time and my teaching time, although I really maintained them. So I would think in that second period in which I was working from '68 to about '75-6, that was a period of difficulties and problems, there was a great amount of building, there was a deep amount of unhappiness. At that time it became evident that, and it is still evident, that there was antagonism against sciences and against scientists by other parts of the campus, which held themselves to be a mystique. I looked into that once; I was chairman of the faculty and found to my great surprise that the highest average salary of Full Professor was not in Physics nor in Economics, but in Romance Languages. The reason for that I looked at was because Romance Languages practically every year got a new chairman because they couldn't get along with the

old chairman, and when you bring in a new chairman, the salary has to be higher than everybody else and that had gone on for 5 or 6 years. So, I think the sciences were not really in any objective sense that I can see treated a great deal better. The teaching loads were noticeably heavier. Several were very good and there was also very uneven development. For example, mathematics, when I came, was not terribly good, but in fact it had a languid existence for 7 or 8 years, and then John Toll appointed Jim Simons who was a very go-getting person and the Mathematics Department today is an excellent department, almost since the day Jim Simons came. And he left again, that I think is too bad, but nevertheless the Mathematics Department has maintained very high standards. I know John Toll had two ideas, which were not bad ideas: one was he did not think that (a) it would be get good faculty all the time and (b) he did not think we could get buildings all the time. There would be a finite amount of time when these things should be done very fast; and I think that was typically sensible for him. However, as a consequence, the amenities of life, the minimum way in which people lived, the auxiliary functions of the university, they were short, not that they were short....., there was no money left. If you get three outstanding people..... then there is no money left forand I think these troubles in a way are still with us. That the middle administration, the auxiliary services, services, they never really came up to what the rest of the university was. And if theseunderstaffing continues that creates a great deal of unhappiness and on the part of the students. So, I would think the expectations being great, in a way, Stony Brook and the State should not be deceived. Stony Brook made......I remember you had to drive here from Planting Field every day and I'd worry about the traffic you had to go From a minor place it became a major place and it has now obvious through. difficulties I thinkit was nobody's fault, it was the fact that students and

student expectations were radically off, they were radically altered. Students became very politically active not sympathetic to me. But I think with an academic line for a style of living are not decent and they are very

Interviewee: It takes a long time to build up traditions.

Dresden: You are quite right, it takes a long time to build traditions. It was part of John's style, John would go on with building and tradition, too bad. But to students it is very important that there's a place to go, to faculty it's important. And one of the things which I am sure you'll remember we talked about for twenty years, there really is no natural place for faculty to come and talk to each other they complained about. All we have now is the End of the Bridge, which is not the worst and also not the best, the people who now manage allow a broken wall and a large number of students and a very uneven number of persons coming and going. If you come to eat on the campus in the evening before a concert, it is scandalous and it has been scandalous for twenty years; I think all of these are redundant and it is; I should tell you something which is not related to me but you might find it interesting. I was at the State University of Utah in Logan, Utah, just now. It is a school of 12,000, not the best, not the worst. It is a pretty place. First of all the campus is spotless and it is a pleasure to walk around and see flowers and green grass and you don't see paper cups and you don't see Styrofoam and you don't see coke bottles; it is magnificent. It is obviously clean; you are proud to take your friends there. But what was most impressing to me was something called 'the enrollment room.' They have completely computerized their enrollment. In the room they have a list of all the courses in the fall and if a student wants to enroll, you have a student card, like a credit card, a student number, and you say you want to take Section 1 of Course 200 in History of

Interviewee: Is this other thing found anywhere else in the New York State system?

Dresden: Yes, I would think it is not unheard of in the New York system and if vandalism on the campus was very much more pronounced in the neighborhood of New York than it would be in Ann Arbor or then it would be Utah or someplace like that. We suffer from that and it is part attitudes which are generated or produced by the large city syndrome. If you go to University which is in Chicago, you will find the situation if anything worse than ours, on the other hand if you go to Northwestern University, there the socio-economic class is different and you will I think there were many decisions which have contributed to this. because I think the graduate students in any area here can and still get an extraordinarily good education. Their style of life is not the best but they can get it. And the other areas are forfeit. Undergraduates again are somewhat mixed; I now teaching some. They really come in two the general caliber of the student has gone way down and I must say that bothers me a lot. It is noticeably different from when I came and we still lived in Oyster Bay. The students might be impossible, but they were good; now they are just merely impossible. And there are very good ones. If a student gets all A's from here,

when he graduates he has it made. But there are many who are really quite good and I think that one should really watch for the future that somehow very good people are not being replaced by really impossible people. We also I think have to be much stricter. In the summer I had a workshop for high school teachers and they filled with people I talked to them about education. They were appalled by the dormitories in which they lived. In fact Jerry Schubel doing all of this, they gave him a terrible time when he came to talk about the research and they talked it over, they also said what do you do, he also talked about his functions as Provost and the graduate facilities. And how can you tolerate something that looks like the South Bronx, the windows smashed and the stage boarded up and the filth all over the place. We have got to do something about that and I think the time is time that I never worked for the central office per se but I was one of the, I don't know how it's called, one of these visiting scientists of the system-wide. I was on call when I went to many places, to Oneonta and I went to Cobleskill and I went to Cortland and I think I must have gone to ten, twelve of the major, what used to be Harpur, what is now Binghamton and I knew it quite well and I've been in Buffalo and Albany quite often. I organized for a while Physics Colloquia of the four university centers. I did that some ten, twelve years ago. These things always go for a while and then they go away. So, I think it has become a well-known university. I can name many individuals who did many things Then I should say something John Toll. Let me say something about who I did not know But I know Jack Marburger very well. I think like a good president, he's a little bit "kavp." Because he has got to maintain the research, he has no choice; he also has to do something about the perception that living in Stony Brook And there is not much he can do about it.

I am really shocked at the number of students who come from nearby. Because my office is on the eighth floor, every Friday afternoon when I am working there, I look and the students leave. I would understand if the students would go to Paris or Florence or San Francisco, I would say, all right, they go; but they go to Brentwood and Syosset and there is no reason to do that. It means that the university, in a way, becomes of the high school and that cannot be. This is the only university where the party night is Thursday night; students go to parties on Thursday, they don't go to parties on Friday because on Friday everybody is gone. Now that's scandalous, you see, because it means that Thursday, Friday, Saturday and Sunday are already gone. It means that the establishment of atmosphere, as you say, an ambiance, there is none. Jack is trying very hard and I think the ideas are right. He finds himself in the time of decreasing resources and also decreasing enrollment and also lowering, so I think Jack a very positive influence, although it is hard. I consider Bentley Glass a person who has done a considerable amount for the university. Bentley's style is different from John Toll, he is a man of great eminence, but he is a man, nevertheless, of great integrity and also of great he knows biology, he is a major biologist, he knows about education, he is a person deeply interested in music, he goes to concerts, he goes there, I go there and I see him there. So I think he is a very important person. Then there is a whole group of people who did things. Stanley Ross tried; he was somewhat kavp, again he did not. Sidney Gelber was mixed. Sidney had very good ideas; he always found himself in a somewhat ambiguous administrative situation; that he felt he never had quite enough power to do things. Alec Pond was a good but he was so identified with the policies of Toll that whatever were good about them would be given to Toll and whatever was bad about them was blamed on Alec. I thought and

I told him so, he knows that very well, the most serious mistake he made was to try to become president here at the University. It was extremely divisive and I knew long ago that he would never make it because of all the and all the resentment (a) against sciences, (b) against all of that would be directed against him. So, I think Alec had a very important role, but I think it was reasonably but not altogether so. I think one created an image for the University, which was then a very important one because it showed that this of the major for was one places science. supported Alec Pond in the abortive attempt for the presidency; and I told him there was going to be yet another revolt, that will not do, that the sentiment is too grim. So, I would think of the main persons Weisinger was a Graduate Dean; I think he was a reasonably good dean. He was a little gadfly. If he could say something clever about some impossible policy, he would say something clever even though he would be stuck with it. I could give you numerous examples. I think Pellegrino was an interesting person; again he put the place very much on the map. I liked him; I had nothing but fights with him but I liked him a lot because he had ideas and he had initiative and he had strength. There was a man he brought in whose name was Knudson, who I also thought was very, very good. In terms of the provosts, the vice presidents, Alec and then there was also Homer Neal, who I knew extremely well. Homer was much too decent a person to be a good dean, because he tried, he was a good administrator, he knew how to do this, and I think his heart was in the right place; I think he had many initiatives in a way he should not have left when he did because the initiatives were incomplete and now they have just gone away. provostship, he left the university also. He is now chairman of the Physics Department at University of Michigan in Ann Arbor. I knew Homer very well and I often talk to him and it is interesting that he was really happiest in the lab. When you saw Homer in the lab with his equipment he looked, I barely recognized him, because that was really what he wanted to do and that's what he really wanted to do and that's where his heart was. Again, he was pressed from all sides in all ways but, by the way, I make you a bet and you can quote me, I make you a bet that in a year from now Homer will be president of the University of Michigan. And I'll tell you why I say that; the president of Michigan, whose name was Mr. Shapiro who went to Princeton and he is there now. They are looking for a president at Michigan. This will give you a general feeling, it will okay with me if you have any other questions, I will be very happy to.

Interviewee: Your impression of the way in which the central office, the Chancellor and the subordinates there, regard Stony Brook and the degree to which there is a conception of equity all around among the four university centers as distinguished from the feeling that at least Stony Brook should be made the strongest of the four.

Dresden: My impression is mixed and let me tell you why. When I was really in charge of the faculty between four and six years, so I had some, very, very often when I talked to the president, who at that time was John Toll, all kinds of limitations were due to the central administration. When I go to know especially Sam Gould, and Ernie Boyer was after Sam Gould, I got to know him quite because as chairman of the faculty I went to meetings, I found that many of the limitations allegedly enforced by Albany were in point of fact not enforced by Albany but were interpretations of Albany directives given locally. So I never had the impression that Albany, the central administration was particularly for Stony Brook. Ernie Boyer who I knew well I could talk to very easily and I always found him reasonable and pleasant and sensible. So I

Interviewee: Things changed when Rockefeller left.

 have not talked a great deal with Marburger about that. Let me say one another things which was good when there was this assessment of physics departments all over the country, in the last know evaluation, I think Stony Brook came in either 11 or 12 in the country, that means we were better than Michigan, better than Indiana, better than, we were either right around Yale so we really did extremely well, which pleased me. I will make a prediction that the next way around we don't do that well. (end of side 1 of tape) Replacement has been slow and as you know to replace well takes an enormous amount of time and effort and the institutes will by next fall when I leave or next spring when I leave will have four vacancies. Now that's an enormous number of vacancies and it takes over a year to get somebody; they should really do that. I keep on telling them, I can't do it for them. I know what to do.

Interviewee: Who is head of the Institute now, Yang?

Dresden: Yang is still there and I don't really know what is going to happen; I don't know whether I will be replaced. My feeling is that I should not. My feeling is now that they should have a rotating directorship and they should have an administrative person because a good deal of the work you don't need a physicist for and it is much better, there are lots of letters to maintain contact with the granting agencies, to see that we get the proper post docs here, that they are paid, all of these things, you don't somebody like myself for that at all. Yang never does it and so I think he should have his secretary and his aides, he will get more out of it. And policy decisions which are taken are very few; they are who do we get, and who are our visitors and so you don't really need a formal person for this.

Interviewee: What about Andy Jackson?

Dresden: He is not in the Institute, he is a good nuclear physicist; I would think he is not the top but he is very near the top but he may not quite the top but he is near it and he is an active person. This is a matter of the organization of the Institute, which is in trouble somewhat. There are theorists who are in the Institute and also theorists outside of the Institute. It is not such a good idea and I really think they should move them. At one time there was a quality difference before the Institute they were chosen by different criteria so there were no hard feelings if say Arnie Feingold who is a fine fellow but is not in the Institute that was fine because he hasn't done any research in the last 25 years. On the other hand if you take people like Andy Jackson like many others who are quite good researchers and whose quality differs between them and the people in the Institute there is no longer a very clear at all. For example, people in the Institute, with the exception of myself, teach very less. Instead of teaching two courses every semester, they typically teach one course every other semester so it's a huge reduction. I, by the way, always teach because I can do it very easily and because I enjoy doing it. I do it in part because of everything the Institute does, well that's something that has to be straightened out. It's all right if you start that way, it's not all right if And that really brings you back to Andy Jackson. Andy Jackson in terms of his abilities might easily be in the Institute, might easily be the administrator, but I think one has to It is no longer up to me So I just stay out of it, although I think it is not always wise.

Interviewee: I think that there is one piece of unfinished business that I would like to see them tackle and that is the scattering of the Humanities all over the campus. Nobody seems to be able to convince Albany that something should be done about it or do you think something should be done about it? You have

Philosophy in Old Physics, Religion is now with Comparative Literature in Chemistry, you have the languages here, English in another building, and you have History which is I think part of the Humanities are with the Social Sciences.

Dresden: Isn't there now a Director of the Humanities Institute?

Interviewee: He is Don Ihde, a philosopher whose field is phenomenology and the Director of the Institute is somebody whose specialty is television, radio, communications.

Dresden: Actually, I met her. I think because the Humanities here have for so many years have had a severe identity crisis; they never really developed into a strong scholarly or intellectual community and about all they could agree on is that physics is treated too well. And I think that is very bad because as you know anger and some of these feelings are very negative things and keep you from doing things.

Interviewee: Max, thank you very much. And if you have files, don't throw them out.

Dresden: In fact, I will have to start looking at them right now because I have many files.

Interviewee: Let Evert Volkersz have them in Special Collections on the second floor here in the Library.

Dresden: Thank you very much; always a pleasure.

Interviewee: It was a pleasure to talk with you.