tively small, as can indeed be seen at low temperatures. In vitreous silica, a strong glass, the boson peak amplitude is six to seven times larger than the signal from the sound waves, while the amplitude in the more fragile selenium is approximately the same size as the sound wave signal; the same result can be inferred from the height of the peak in C_p/T^3 in Fig. 2a.

Finally, we come to the connection between the soft-potential model and the *mode-coupling theory* [11] based on a successful treatment of the fast picosecond motion in simple liquids. The theory explains the rapid rise of the viscosity with decreasing temperature in terms of a simplified equation of motion for the density correlation function of the liquid. This equation leads again to a divergence of the viscosity, only this time at a critical temperature T_c above T_g. The result implies that the fast picosecond relaxations of the mode-coupling theory should suffice in describing the flow process, and that the high-barrier processes need not be invoked, at least above T_c. So the question is whether these fast relaxations have anything to do with the soft modes of the soft-potential model in the same frequency region. If they have, then one could hope for a detailed microscopic basis for the mode-coupling theory in a specific substance.

Conclusions

The successful description of the low-temperature anomalies of glasses in terms of the empirical soft-potential model implies the existence of soft anharmonic localised modes in undercooled liquids. In agreement with the results of numerical work, the number of such modes seems to increase with increasing temperature above the glass transition, and their damping gives rise to a fast quasielastic component in neutron and light scattering data.

The experimental identification of a nearly temperature-independent width of the quasielastic scattering at higher temperatures can be explained by assuming that the anharmonic modes become overdamped about 100 K above T_g, in the close neighbourhood of the critical temperature of the mode-coupling theory.

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Europhysics Notes

• Announcements Delayed

Owing to delays on agreement being reached between the Commission of the EC and selection decisions (in April) by the Programme Committee of the Human Capital and Mobility (HCM) Programme, formal announcements of the results of the latest selection rounds will probably not be made before June.

E-mail fellowship lists: EPS makes the lists of Selected Installations, Fellowship institutes, and Networks available by e-mail (simply send a message to epnews @ cernvm.cern.ch) as useful information on the availability of HCM fellowships can be obtained from contacts and coordinators. Such lists were released in Oct. 1992 (Installations and Fellowship institutes: 1st round), Jan. 1993 (Networks; 1st round, 1st list), May 1993 (Networks: 1st round, 2nd list). The delay affects publishing lists for:
- Installations: 2nd round pre-selection (47 pre-selected; final selection in Sept. 1993).
- Institutional fellowships: 2nd round (678)
- Individual fellowships: 4th round
- Networks: 2nd round (62)
- Euroconferences: 2nd round (≈ 60).

Closing dates for future selection rounds in the HCM programme: Installations (no more); Institutional fellowships: early-1994; Individual fellowships: 15 July 1993, 1994; Networks: 15 June 1993, end-1993; Euroconferences: 15 June 1993, Oct. 1993.

• NuPECC Recommends Radioactive Beams R&D Network

A Nuclear Physics European Collaboration Committee (NuPECC) Study Group chaired by R.H. Siessem has issued its report of the physics case and technical options for accelerated radioactive beams (ARB's) which are expected to become a major tool for nuclear structure physics as "they will greatly extend the opportunities available for the discovery of novel phenomena in nuclei far from stability". The report recommends that an R&D network be established to ensure that an ultra high-intensity European ARB facility be built at the start of the next millennium. R&D projects on very high-power positive ion sources are vital so that full use can be made of existing high-intensity primary beams employed in the spallation approach. Concerning other regions of bombarding energies and nuclear species, development of CERN's ISOLDE facility for very low energies should be continued; the ARENAS facility for nuclear astrophysics which is being upgraded should be made accessible to European physicists — as should a facility proposed by GANIL for extreme N/Z values and at high energy. Finally, NuPECC endorses the EXCYT project calling for the development of negative ion sources for a precision tandem beam.

P. Kienle, the Chairman of NuPECC, reports that the committee decided at its meeting on 7–9 May in Madrid to assess the implications and applications of nuclear science to other fields. Working groups will point out opportunities and perspectives for some 10 fields of science and applications in a very ambitious and interdisciplinary study that will hopefully come up with concrete proposals for presentation to governments. Another NuPECC topic of high-priority is a future continuous-wave electron accelerator. The European Electron Accelerator Project [*EN* **23** (1992) 136] with a four-country steering committee plans to issue its report in Sept./Oct. for presentation to funding agencies.

Meetings

15 - 21 Aug. 1993 **Neutron Scattering:** Summer School Zuoz, Switzerland
R. Bercher, PSI, CH-5232 Villigen PSI
tel./fax: +41 (56) 99 34 02 / 98 23 27
A: 30 Jun 93 / lim 100 / SFR 420.-; incl. board

22 - 27 Sept. 1994 **Thinking Science for Teaching - The Case for Physics:** Int. Conf. Rome, Italy P. Maiolo, Lab. di Didattica delle Scienze, Dip. Fisica, Univ. "La Sapienza", P.le Aldo Moro, 2, I-00185 Rome Ab: 30 Nov 93 / PP: 15 Jun 94 / lim 100 / $US 100.-

Corrections to March 1993 List

Conference: undecided 1994 (not School: Varenna, 25 Aug. - Sept. 2, 1993) **Adv. Toroidal Devices with Innovative Physics & Technolgy** Varenna, Italy E. Sidoni, ISSP, Via Celoria, 16, I-20133 Milan
tel./fax: +39 (2) 239 22 67 / 239 22 05

6-14 Sept. 1994 (not 1993) **Physics & Technology of Tritium in Fusion Reactors:** Course & Workshop Varenna, Italy
E. Sidoni, ISSP, Via Celoria, 16, I-20133 Milan
tel./fax: +39 (2) 239 22 67/239 22 05