

DISSENTING OPINIONS ABOUT TAYSEER ARURI

In response to the letters in the May PHYSICS TODAY (page 15) concerning the case of Tayseer Aruri and, in general, concerning actions that have had to be taken in the Israel-administered territories by the authorities, please be advised of the following.

First, Aruri has been ordered to leave the country because of his major and active role in the planning, organization and direction of acts of violence and disorder in the territories. Moreover, he was a delegate to the PLO's Palestinian National Council, and the PLO is an organization that, to this day, advocates the phased liquidation of Israel—Chairman Yasir Arafat's contrived statement to the contrary, at his Geneva press conference in December 1988, notwithstanding.

At the time of his recent arrest, a notebook was found in Aruri's possession containing, among other things:

- ▷ reports on the activities of the illegal "popular committees" that have been planning and supervising the current wave of riots and other forms of violence
- ▷ notes on planned future activities of these committees
- ▷ plans for the holding of strikes at prison facilities
- ▷ notes on ways and means of recruiting additional people for the street rioting.

In point of fact, Aruri has a long record of hostile and subversive activity. He was detained in 1974 after it was discovered that he had been engaged in planning acts of terrorist violence under the auspices of the National Palestinian Front and the military wing of the Palestinian Communist Party, including the collection of firearms and other weaponry.

During his subsequent detention, Aruri attained a senior position among his fellow prisoners and engaged in subversive activities within the prison walls, including the recruitment of terrorists, the organization of terrorist cells and the planning of terrorist activities.

Aruri has appealed his expulsion order, which had been confirmed by

the Advisory Commission to the Commanding Officer of the Central Command, and his case is pending before Israel's Supreme Court.

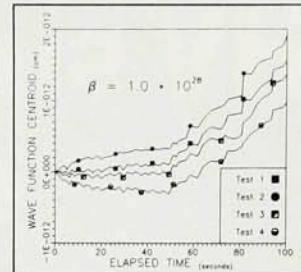
Israel has been harassed for some 18 months now by the Arab riots in the territories—the *intifada*. Our problem is that we refuse to utilize the full extent of our military power—or whatever degree of brute force is really necessary—to put an end to these riots (as some other countries have done in the past), because our own moral code will not permit this. But that does not mean that we can or will allow this rioting and violence to go on, unresisted and unpunished. We find ourselves in an ongoing search for ways and means to restore order and normal life in the territories for whose normal life and well-being we are responsible—short of "mowing down" the rioters with indiscriminate lethal fire. One of the ways we have chosen to do this is the arrest and imprisonment or expulsion of the planners, inciters and organizers of violence—people like Aruri.

Israel's measures against the planners and the perpetrators of violence will end the moment the violence ends. Israel has offered a comprehensive, eminently reasonable and fair peace initiative involving, among other things, early elections among the Palestinian Arabs to choose their own representatives to peace talks with representatives of Israel.

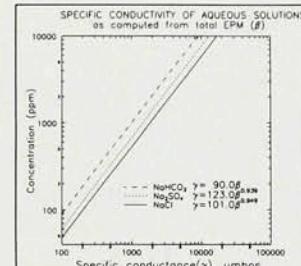
Let the purveyors of violence stop sending 10-year-old children to throw rocks at soldiers and at passing cars. Let them, instead, go to the polls to elect grown-ups who will sit with our grown-ups and talk peace with us. Then we can stop shooting at youngsters (even if it's only rubber bullets), arresting people and expelling troublemakers. Please direct your pleas to *them*.

MOSHE AUMANN
Consul General
Embassy of Israel
Washington, DC
6/89

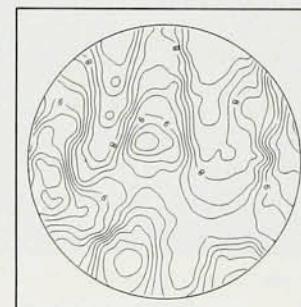
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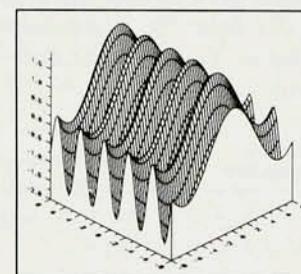
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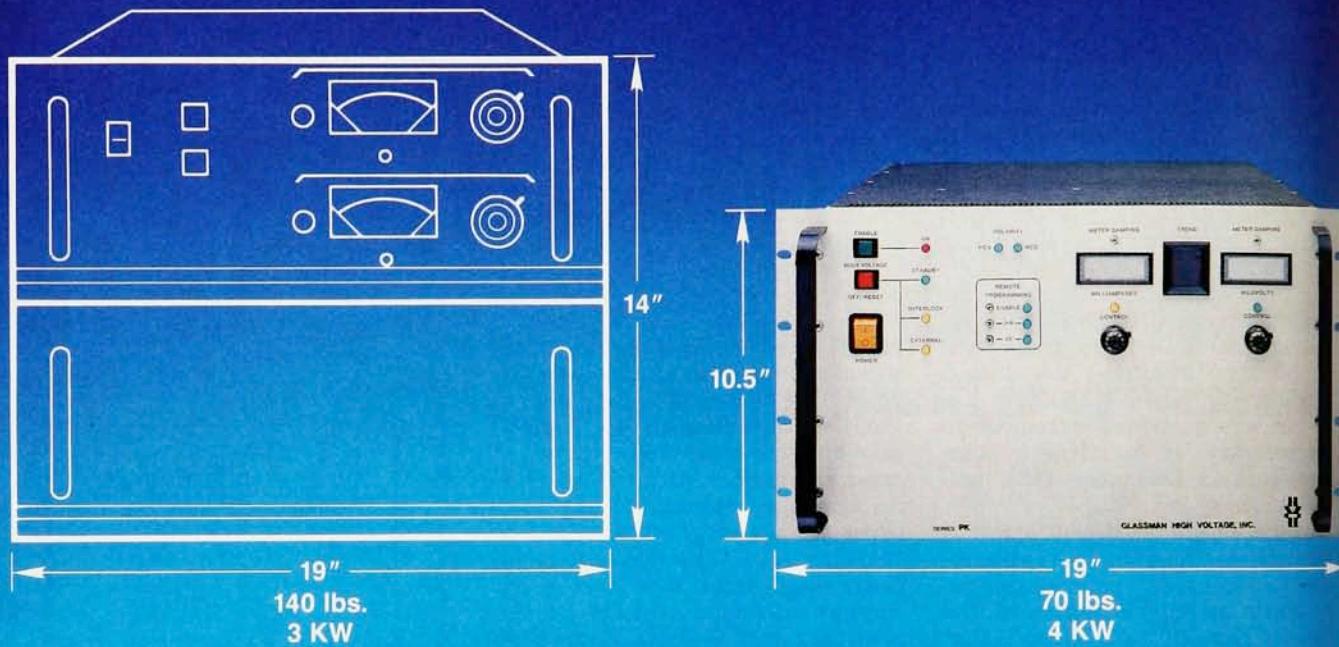
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trative detention in the territories is not released for fear that disclosing testimony of Palestinian Arabs and secret Israeli agents would endanger their lives, but the following information regarding Aruri is on record: Aruri has played a senior and significant role in the management and planning of acts of violence in the territories—acts of violence in which people have been seriously wounded and killed. He has been involved in obtaining and distributing firearms for the military wing of the Palestinian Communist party (which he helped found) and the National Palestinian Front. He was previously arrested for these activities, and while in prison he actively engaged in recruiting terror cells and planning acts of violence. At the time of his latest arrest, Aruri had in his possession a notebook detailing present and future acts of violence. These facts contradict Edward Witten's claim that Aruri was involved only in normal legitimate political activity but not violence, Freeman Dyson's claim that the faculty of Birzeit University, at which Aruri is employed, does not encourage terrorism, and Richard Wilson's claim that the Palestinian Communist Party (a part of the PLO) has no military wing.

Witten also mentioned Sami Kilani and Nicola Dabit in his letter. Kilani holds a senior position in the Popular Democratic Front for the Liberation of Palestine. This is the terror organization that performed numerous terrorist activities (for example, the massacre of the schoolchildren in Maalot, Israel). He has been actively involved in public disturbances, illegal strikes, distribution of inciting material, recruiting new members to the PFLP and planning subversive activities. Most of these actions were centered at Al-Najah University in Nablus, where he serves as lecturer. At present Kilani is free. Dabit is also a senior member of the PFLP. He has been active in inciting people in Ramallah to acts of violence and riot. At present Dabit is free.

YEHUDA B. BAND
Allied-Signal Inc

Morristown, New Jersey

Let me take issue strongly with the concern for the Palestinian Communist physicist Tayseer Aruri expressed by Edward Witten, Freeman Dyson and Richard Wilson in long letters. The Israeli Army explains that the Palestinian Communist Party has become much more militant as a result of the Arab uprising, which uses not merely lethal rocks, but gasoline bombs (which have killed,

among others, an Israeli mother and her three infant children) and recently gunfire. In my opinion, the Israeli Army has been *incredibly* restrained in its reactions, much more than our armed forces would be in similar circumstances.

Let me remind Witten and his colleagues that such an uprising would have been crushed in a few days in any Arab country! One need only observe the actions of Iraq, which used poison gas to crush a Kurdish national uprising. One also should remember the death of 15 000 to 20 000 Syrians in the city of Hama when they dared to threaten the regime of the Syrian dictator Hafez Assad.

The existence of Birzeit University and other Arab universities is a tribute to the generosity of the government of Israel. Surely in no Arab country (with the possible exception of Morocco) has such higher education in a foreign culture, press freedom and freedom of speech been possible for Jewish inhabitants. Those Jews living in the Arab world were treated miserably, and 600 000 were expelled after 1948, although they had lived in those lands for thousands of years.

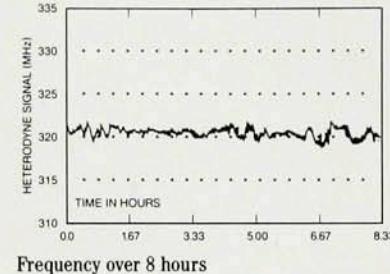
As one who fought with articles and letters for the freedom of Andrei Sakharov from Soviet incarceration, I have just as great a concern for free speech and liberty as my esteemed colleagues. Unlike Sakharov, however, who fought for democracy in his country, the Communist Aruri seeks totalitarian dictatorship and expulsion of Jews from Judaea and Samaria, where Jews have lived for thousands of years (that is to say, in Nazi parlance, a *Judenfrei* zone is planned).

It is clear that the Communist Aruri is active in Arab "popular committees" that foment attacks on Jews. Rocks can kill, not merely gasoline bombs. Shall only the bomb thrower be punished and not the planner and instigator, even if he is a physicist?

My colleagues who support a tiny Palestinian state (which would be a mortal danger to Israel, inevitably leading to a horrible war) in Judaea and Samaria should read the book *From Time Immortal* (Harper & Row, New York, 1984) by Joan Peters (who is not Jewish). By detailed research, she proves that over 80% of the present Palestinian Arab families immigrated into what was Palestine within the last 120 years. Are they not settlers too? Why is their claim better than that of Jews who lived in these lands for many hundreds of

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years during Biblical times? A remnant of Jews lived there throughout history, even under Turkish rule from 1518 to 1918. Bethlehem and Hebron are Hebrew names for those towns.

After those Arabs, whether physicists or not, who use violence or plan violence are deported, real elections, free from PLO murder and intimidation, can occur and real peace can be negotiated.

HOWARD D. GREYBER
5/89
Potomac, Maryland

The pleas of Edward Witten, Freeman Dyson and Richard Wilson on behalf of Palestinian detainees in the West Bank need clarification. We have an obligation to learn the attitudes of those detainees toward Palestinian terrorism generally, and to certain of its most recent manifestations. I refer particularly to the 2 May CBS broadcast of the "Dan Rather Report," which showed Arab children of 5 and 6 years of age, according to the report, throwing rocks and perhaps more lethal projectiles at Israeli troops.

We have lived through many horrors of many wars in the last 50 years, but I cannot recall use of 5- and 6-year-olds in combat for the benefit of TV cameramen. Whatever outrages Witten, Dyson and Wilson impute to the Israelis, none compares in my mind with the barbaric child abuse sponsored by the PLO that I witnessed with my own eyes on 2 May.

I assume that Witten, Dyson and Wilson share my abhorrence of such tactics. It would materially strengthen their own moral position, however, if they expressed abhorrence of all terror for political purposes. It would also strengthen their position if they made a good case that Aruri, for example, who was trained in Moscow and does not deny being a member of the Communist Party, has specifically disavowed what has been Marxist-Leninist doctrine for more than a century—namely, that the overthrow of capitalism requires readiness to resort to violence.

Compare Aruri with Mikhail Kazachkov, a physicist in the *gulag* since 1975, whose case was movingly described by A. M. Rosenthal in *The New York Times* for 7 February and 24 March, based on a personal visit to Kazachkov's place of confinement. I have never seen Kazachkov's name in PHYSICS TODAY. Kazachkov staged a demonstration during Rosenthal's visit, and he has not been heard from since. It is urgent that personal and official representations be made on his behalf. For such representations

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to be effective, they should not be compromised or diluted by appeals of far more questionable character.

LAWRENCE CRANBERG
5/89

Austin, Texas

I vehemently protest your policy that allowed three, obviously orchestrated letters to appear in the May issue referring to the allegedly improper incarceration of a Palestinian physicist. I protest your allowing the letters' writers, who were acting in concert, to have three individual letters published on the same subject rather than having them all sign one letter. I protest your publishing this information without requesting and printing a letter from a responsible individual or government body explaining the actions that were taken. I protest your allowing political rhetoric to appear under the guise of impartial concern for a colleague.

Specifically, it should be pointed out that the university in question was not even in existence prior to Israeli control of the West Bank. Under Arab governmental control, the Palestinians had no opportunities for post-high school study in the areas where they lived. It is a fact that these institutions on the West Bank have become a focal point for unrest, leading to immense amounts of property damage in addition to the well-publicized injuries and fatalities. Recent news reports have also corroborated the fact that leaders of the uprising have been using the occupation of "journalist" as a cover for their actions. Thus close supervision of these individuals is necessary for the security of Israeli citizens.

Freeman Dyson claims, "I report here only facts of which I have firsthand knowledge." Then a few lines later he states that "the students did not learn radicalism from Birzeit. They learned radicalism from their daily encounters with Israeli soldiers." This is certainly not something he learned firsthand, since it is not true. Then he claims that he knows that the faculty (does he mean all or some or one?) never encouraged terrorism. How can he prove this? Did some professor there tell him so and that made it a firsthand fact?

I would have had no objection to your publishing a single letter, signed by as many people as wished to, containing unbiased facts with a request to have the situation remedied in a fair and judicious manner. But I do object and protest your allowing this orchestrated attack, containing opinionated, purely political rhetoric, to be published without the courtesy

of attempting to corroborate the facts or permitting a response to the slurs.

REUBEN RUDMAN
Adelphi University
Garden City, New York

5/89

THE EDITOR OF PHYSICS TODAY REPLIES: Reuben Rudman objects to our handling of the three letters on Tayseer Aruri printed in our May issue. We see no problem in publishing a number of letters concerning the same subject in PHYSICS TODAY if they are of general interest.

WITTEN REPLIES: Imprisoned Palestinian physicist Tayseer Aruri has a long record—which I stressed in my previous letter and which none of the present writers deny—of advocating peace and reconciliation between Israelis and Palestinians. A senior Israeli army commander recently acknowledged (see *Time* magazine, 26 June, page 42) that Palestinians like Aruri who engage in peaceful dialogue with Israelis need courage "since they know we can throw them in jail on the slightest pretext."

In most instances—including Aruri's case—after being thrown in jail these people are held under administrative procedures in which the charges and evidence are secret from the accused and his lawyers. This cripples the judicial process, while leaving Israeli spokesmen free to make such allegations as they wish—allegations that are reflected in the letters to PHYSICS TODAY.

The physics community has every reason to object to such treatment of one of our colleagues. And indeed 1100 of the world's most prominent physicists, including 18 Nobel laureates and over 70 members of the National Academy of Sciences, have recently joined in an appeal calling for Aruri to be freed.

The Israeli government has never offered evidence linking Aruri to violence. When Israeli Consul General Moshe Aumann writes of "acts of violence and disorder," it is important to realize that almost any peaceful protest against military occupation can be called a "disorder." And this is what the government of Israel has repeatedly called such actions.

Aumann emphasizes Aruri's alleged role in Palestinian popular committees, which he describes as "illegal." Actually, Aruri was arrested on 8 August 1988, and the popular committees were outlawed ten days later, on 18 August! The popular committees were mainly concerned with Palestinian self-reliance in agriculture, education (since the schools are

closed) and so on. By outlawing them, the government of Israel all but officially declared that it considers peaceful protest in the occupied territories illegitimate.

Prison strikes, which Aumann mentions, have consisted of hunger strikes, chanting of slogans, prisoners refusing to go back into their cells and the like. The outbreak of strikes in the prisons comes as no surprise given the conditions in which thousands of political prisoners are held.

Aumann also makes certain allegations about Aruri's activities in the 1970s, when he was imprisoned without formal charges or trial for four years. These allegations were originally made by Israeli spokesmen 15 years ago, but the Israeli government declined to put Aruri on trial and attempt to prove its case.

The Palestinian Communist Party, of which Aruri is said to be a member, has never engaged in terrorism or violence, has long advocated that the Arabs should recognize Israel, and has a legal counterpart in Israel that is represented in the Knesset.

Aumann does not dispute Aruri's personal record of advocating Israeli-Palestinian coexistence and peace. If it is true, as Aumann claims, that Aruri has been elected to the Palestine National Council, then it is good news that such a strong peace advocate is represented in that body.

To readers of PHYSICS TODAY, Aumann describes Israeli Prime Minister Yitzhak Shamir's election plan as a "comprehensive, eminently reasonable and fair peace initiative." Back home, however, "to his own right-wing Israeli constituents, Shamir sends a different message," according to the *Washington Post* (19 June, page A22). "He has told them in recent speeches that his plan is largely a public relations exercise designed to take the heat off Israel."

Finally, I would like to point out that Palestinian physicists Sami Kilani, of Al-Najah University, and Nicola Dabit, of Birzeit University, have once again been imprisoned, again without charges or trial. (Yehuda Band's statements about their current freedom refer to their release from a previous detention in 1988.) Kilani was "beaten with clubs and rifle butts" by Israeli soldiers for about 90 minutes on 1 April, according to Amnesty International, and was arrested on 2 April. Amnesty (which has adopted Aruri and Kilani as prisoners of conscience, certifying that they have not used or advocated violence) notes that "since December 1987, thousands of Palestinians have been beaten, sometimes in particular

ly vicious ways, while in the hands of army or security personnel." Dabit was arrested on 29 May and taken to the Petah Tikva interrogation center, which according to a colleague at Birzeit University is "noted for harsh interrogation employing extended isolation, sleep deprivation, hooding, etc." He was freed on 25 June.

EDWARD WITTEN

Institute for Advanced Study
Princeton, New Jersey

7/89

DYSON REPLIES: When I wrote, "I report only facts of which I have firsthand knowledge," I meant what I said. For example, my statement that "the students did not learn radicalism from Birzeit [but] from their daily encounters with Israeli soldiers" was not based on hearsay evidence. It was based in part on a street battle that I witnessed on my way to Birzeit in 1982, and in part on a conversation with a teenager who had been crippled by Israeli gunfire while walking (not throwing rocks) in an earlier high school demonstration. I do not mention the name of the teenager here since I have no way to ask her permission. Such encounters with Israeli soldiers have been a fact of life on the West Bank for many years, starting well before the *intifada* began.

The allegations made against Aruri in these letters are not new. I have discussed these allegations with various Israeli friends as well as with Americans friendly to Israel. So far as I can determine, the allegations are true only to the extent that all overt political activity directed toward Palestinian independence is illegal. It seems that Aruri has violated Israeli law to about the same extent that Andrei Sakharov violated Soviet law by his political activities. We may hope that the Israeli government will change its mind about Aruri, just as the Soviet government changed its mind about Sakharov.

In conclusion, I would like to appeal not only for the freedom of Aruri but for the reopening of Birzeit University and all the other schools and colleges now closed on the West Bank by order of the military authorities.

FREEMAN DYSON

Institute for Advanced Study
Princeton, New Jersey

7/89

WILSON REPLIES: My letter was submitted independently of and without knowledge of the letters of Freeman Dyson and Edward Witten.

I note that the only specific objection to my letter is my statement that the Palestinian Communist Party has no military arm. I relied on the many

statements to that effect by Amnesty International. Of course I cannot prove a negative. Although some of the correspondents state that the party has a military arm, they submit or quote no evidence. There are obviously some Palestinian Communist Party members who advocate violence, just as there are some members of Israeli political parties who advocate violence. I have always assumed, perhaps incorrectly, that

the party has aims similar to those of the Communist Party in Israel, which is legal and even has four members in the Israeli parliament. If that is so, mere membership in the party cannot be a crime, whatever Lawrence Cranberg or anyone else may think of Communism in general or any specific teaching of Marx or Engels.

I made considerable efforts to get reliable information. In October 1988 I, together with other Harvard physi-



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cists, wrote to Yitzhak Rabin, who as head of the Israeli military is responsible under international law for safeguarding the rights of individuals in occupied territory. We asked him several questions and sent a copy of our letter to the Israeli Embassy in Washington. What are the specific charges against Tayseer Aruri? Has he got adequate legal representation? Has he got proper medical attention in prison? When is the hearing, and what is the procedure to ensure that it is fair and proper? Two months later Rabin replied, but not to a single one of our questions. I am therefore particularly glad to see the letter of Israeli Consul General Moshe Aumann, even though it is six months late and not very specific.

In my letter I made no attempt to judge the guilt or innocence of Aruri, because I did not, and do not, know. The accuser declines to present a specific charge, and the accused is not in a position to respond. But I did endeavor to describe what specific actions are counted as crimes in Israeli occupied territory and how they differ from the situation in the rest of the world.

Yehuda Band mentions Sami Kilani. Kilani's situation was brought to the attention of The American Physical Society in 1984 at the request of an Israeli citizen. After enquiries, APS President Robert R. Wilson wrote to the Israeli authorities, and I am informed that Kilani was released from preventive detention soon thereafter, although it was renewed from November 1987 to December 1988. In April of this year, Kilani was beaten up for two hours at an Israeli checkpoint, and then taken to the hospital. Later that night he was arrested again. His friends believe that this was done to prevent his being seen in public with his obvious wounds.

Howard Greyber wants us to understand the extent of Israeli generosity to Birzeit University. It is mainly paid for by the Palestinians themselves. Some capital funding comes from wealthy men who were born in the area but had to leave in 1948. Some of these men I am proud to call my friends. The Israeli generosity seems limited to allowing the university to open sometimes. Birzeit, together with all other educational institutions on the West Bank, has been closed for most of the last two years. Before 1967 Palestinians could travel freely to the American University in Beirut or the University of Jordan in Amman. Now it is not so easy and local institutions are more important. Also, Greyber has not

noticed the explosion in Arab education in the last 20 years. For example, the three major new universities in Saudi Arabi, in Jeddah, Riyadh and Dhahran, have over 25 000 students each. Incidentally, the respect that Aruri's fellow prisoners give him could be due to the Arab respect for scholars, and need not be attributed to more sinister motives.

It is hard to compare and prioritize civil rights cases, as Cranberg wants to do. They are all different. All need our attention. I, for example, have personally written about, and when appropriate acted on, cases in Argentina, Brazil, Iraq, Lebanon, Pakistan, Syria and the USSR as well as on the West Bank.

RICHARD WILSON

Harvard University
Cambridge, Massachusetts

7/89

Mixing Instructions for Invisible Paint?

Boris Al'tshuler and Patrick Lee's elegant explanation (December 1988, page 41) of the coherent backscattering peak was so lucid that the undergraduates in my laser course understood it perfectly—and that's when the trouble began. As Al'tshuler and Lee explain, time-reversal symmetry ensures coherence between conjugate paths, and hence the constructive interference in the backscattering direction, which yields the peak. My bright undergraduates countered (in effect) that the scattered intensity for a pair of conjugate paths is actually $I = \cos^2(\mathbf{q} \cdot \mathbf{d}/2)$, where \mathbf{q} is the momentum transfer and \mathbf{d} the separation between the first and last scatterers, and instead of a peak in the backscattering direction one gets a series of oscillators spread out over all directions.

That's obviously true, so a few extra words need to be added, namely that in a random system one sums the intensity from many different paths with different values of \mathbf{d} . I explained this using the blackboard and some colored chalk, showing how away from the backscattering direction the peaks and valleys of the different cosine-squared terms tend to average to $1/2$, while along the backscattering direction ($\mathbf{q} = 0$) all terms maintain their maximum value of unity, leading to the famous 2:1 ratio for the height of the peak relative to the diffuse background. But I didn't fare any better than did Al'tshuler and Lee, since my students objected, quite properly, to my adding intensities from the different paths, instead of

amplitudes. This led the discussion into laser speckle and to the conclusion that one should expect random fluctuations in the scattered light, instead of a backscattered peak.

Soldiering on, I explained how an ensemble average over many systems is needed to get the peak out of this optical "noise."¹ Of course, my undergraduates wanted to know why the latex suspension used in the experiments cited by Al'tshuler and Lee represented an ensemble average, and this led us into a discussion of how the optical fluctuations from many randomly moving scatterers evolve in time, and how the effects of multiple scattering could be quantified using correlation functions and measured using correlation spectroscopy.²

It's not every day that undergraduates get to quibble successfully with famous theorists, and so it was clear that there was no way we were going to get back to my original lesson plan on laser flashlamp efficiencies. Instead, I ended the hour by suggesting a homework problem, which readers of PHYSICS TODAY might enjoy tackling: Is there some way to make the conjugate paths discussed by Al'tshuler and Lee have opposite phases, rather than the same phase? If there were, one would get complete destructive interference instead of the more usual constructive interference, and there would be a backscattered null instead of a peak. My students were especially excited about this possibility when it became clear that if this could be done in a practical way, one would have—shades of Stealth bombers and SDI—a form of invisible paint. If you don't quite manage to solve this problem, take comfort in the fact that you're in good company; none of my bright undergraduates solved it either. If you want to peek at the answer, you can look in *Physical Review A* 37, 1007 (1988).

References

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AL'TSHULER AND LEE REPLY: We appreciate the help of Issac Freund (and his undergraduates) in clarifying the argument that we gave in a rather condensed form due to space limitations. We hasten to add the dis-