THIS WEEK

Origins of the Japanese **1429** Triply entangled photons

FRANCE

Physics Prize Falls Foul Of Middle East Politics

PARIS—A bitter dispute has broken out among some of France's leading physicists over a decision by the French Physical Society (SFP) to block the award of a prize named after a Lebanese scientist to an eminent Israeli researcher. The emotional battle has detonated an explosion of charges and counter-charges among the close-knit community of France's physics elite.

The physicist who originally created the Rammal Medal—in honor of a gifted Lebanese physicist, Rammal Rammal, who made his career in France but died while still young—accuses the SFP of caving in to pressure from Lebanese officials and academics to withhold the prize from theoretical physicist Daniel

Amit of Hebrew University in Jerusalem. But SFP officials, and some members of the prize jury, insist that the jury's vote to award the prize to Amit was invalid, arguing that a Lebanese juror was discouraged from attending its meeting. To complicate matters further, officials at the French embassy in Beirut and the foreign affairs ministry in Paris became embroiled in the affair, possibly exerting an influence on the outcome.

The dispute is all the more poignant because Amit is an outspoken opponent of Israel's continuing occupation of southern Lebanon. He spent 2 weeks in a military prison in 1982 for refusing to serve in the Israeli army during its invasion of that country. Indeed, all parties to the controversy agree that, aside from his nationality, Amit was an ideal candidate for the annual prize which, according to its founding statement, is intended to reward a physicist from a Mediterranean country who has "by his life and his [research] activities given a new and modern form to the currents of scientific exchange in this region of the world."

The jury, made up of physicists from France and other countries, voted to award the 1998 medal to Amit on 12 October last year, subject to the approval of the SFP, which administers the prize. But in the wake of a concerted campaign of opposition to the award which began in Lebanon almost immediately afterwards, SFP officers decided early last month to overturn the decision and leave the medal unattributed for 1998. The SFP has not publicized this decision and has distributed a brief communiqué only to those immediately involved and "anyone who

asked about it," according to physicist Roger Balian, who was president of the SFP until early February.

Prize denied. The French Physical Society blocked award of the Rammal Medal to an Israeli researcher.

Nevertheless, on the basis of interviews with all the major players in the dispute, as well as dozens of letters and stored e-mail exchanges provided by both sides, *Science* has pieced together the story of a feud that has been emotionally scarring to all concerned.

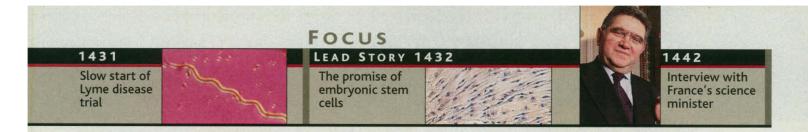
The controversy centers around the actions of Gérard Toulouse, a noted theoretical physicist at the Ecole Normale Supérieure (ENS) in Paris. Toulouse created the medal to honor Rammal, to whom Toulouse was a close friend and mentor. Rammal, a talented scientist who was well known and respected in the French physics community, died in 1991 at age 39 of complications from an earlier heart transplant operation. Over the years, the winners of the prize—which includes no monetary award—included physicists based in Italy, Turkey, Tunisia, Spain, and Egypt.

Toulouse—who was also a member of the prize jury—told *Science* that he had long believed the medal must eventually go to an Israeli because of the many excellent physicists there. But in previous years this suggestion had met resistance from other jurors concerned about possible adverse reactions in Lebanon. This viewpoint had been expressed most strongly by jury member Hafez Kobeissi, secretary-general of Lebanon's National Council for Scientific Research (CNRSL). This resistance, Toulouse now says, "was a betrayal of the spirit of the medal."

In early 1998, however, just before the first of the jury's two deliberation sessions for that year, Kobeissi died. At the meeting, which took place in May, Toulouse proposed Lebanese physicist Ragi Abou-Chacra, then also with the CNRSL, as Kobeissi's replacement. But there are sharp differences of opinion about what happened next. According to some jury members, Toulouse discouraged Abou-Chacra from attending the crucial meeting in October that chose Amit, knowing that an Israeli would not be chosen if a Lebanese juror was present. "Gérard Toulouse had a certain desire to keep Ragi Abou-Chacra away from any discussions," says ENS physicist Claude Taïeb, secretary of the jury. Abou-Chacra, now dean of science at Saint-Joseph University in Beirut, says that Toulouse "advised me not to attend the meeting," with the result that he was "not given a chance to express my opinion ... that we cannot award the Rammal Medal to a scientist from Israel, regardless of the identity of that person, unless peace is established between Israel and Lebanon."

Toulouse insists that Abou-Chacra's appointment to the panel was supposed to have begun only in 1999. He points to an 11 August 1998 e-mail he received from ENS physicist Michèle Leduc, who later became president of the jury, in which Leduc endorses Toulouse's suggestion that Abou-Chacra join the panel the following year. Although Leduc says she now believes Abou-Chacra was officially appointed to the jury just before the 12 October meeting, she adds that she does not believe Toulouse deliberately kept him off the jury but only took advantage of his absence. And Toulouse admits that Abou-Chacra's absence provided a "window of opportunity" to propose Amit for the medal.

With only 10 of the jury's 24 members present at the 12 October meeting, Amit received five votes, with one vote for a Greek physicist and four abstentions. In a later letter to Balian, Leduc wrote that Amit "obviously would have received the majority, and maybe even the unanimity [of the vote] if no member of the jury had feared the Lebanese



reaction." This view is supported by jury member Miguel Virasoro, director of the International Center for Theoretical Physics in Trieste, Italy, who comments in his personal capacity that "everyone, absolutely everyone was agreed that Amit was ideal."

The jury then forwarded its choice to the SFP for ratification. At the same time, Abou-Chacra was informed of the result by another jury member, ENS physicist Franck Laloë. Just over a week later, letters protesting the decision began pouring into Balian's office from Lebanon, signed by political leaders, the Islamic Association, the League of Professors, and leaders of the CNRSL. In addition, a flurry of articles appeared in the Lebanese press—including at least one by Abou-Chacra himself—demanding that the vote be overturned.

At this point, the French embassy in Beirut appears to have taken notice of events. Leduc says she received "two or three" telephone calls from the embassy's attaché for scientific and cultural cooperation, Henri Genaud. "He was annoyed at the reaction in Lebanon, and he wanted it to stop," Leduc told Science. "He was in favor of suspending the medal to calm things down." In an e-mail to Balian, dated 10 November 1998, Leduc describes her conversations with Genaud more explicitly: "The embassy is very clear: They think that the harmful effect of this award to Amit will be significant for the political, scientific, and university relationships between the two countries."

Genaud says he became involved in the affair in a "personal capacity" and not as an official representative of the embassy. But a more intimate involvement by French foreign affairs officials is implied by a 25 January 1999 e-mail from Genaud to Balian. Shortly before, SFP officials had finally decided that Amit would not get the prize, and Balian had asked Genaud to look over a draft communiqué announcing this decision. In the message, Genaud states that he had contacted "the services of the French foreign affairs ministry, the Lebanese CNRS, the Lebanese ministry of higher education ... and the Lebanese Prime Minister Sélim Hoss to obtain, on the one hand, a green light on the text of the communiqué and, on the other hand, assurances as to its publication and the reactions that it would possibly draw."

Genaud suggested to Balian a number of changes to the communiqué, including cutting out a reference to Amit's refusal to serve in the Israeli army of occupation in Lebanon. In the end, however, the SFP opted for a shorter version of the communiqué, which said that the prize would not be given in 1998 due to the "serious and multiple difficulties" which had arisen, and did

not mention Amit.

Balian insists that political pressure had no effect on the SFP's decision which, he says, was based



solely on the irregularities in jury membership. "The French government cannot interfere in this affair, it is private." But Leduc says the embassy's attitude was indeed part of the reason she and some other jury members urged the SFP not to approve the choice of Amit. "There were pressures from the embassy, from the CNRSL, and from other organizations," she says. "We would have been able to resist political pressures if the jury had functioned normally." On the other hand, Leduc adds, if the jury had "functioned normally" she is certain "the vote would have been different."

But ENS physicist Antoine Georges, a jury member who strongly supported Amit, says "it seems very shocking to me that the SFP could decide to not give a medal on the basis of the nationality of the candidate." And Toulouse says, "The Lebanese never had the chance to know who Daniel Amit was. They said we must wait until the political situation is better, but that is completely contrary to the scientific spirit, which is to be in advance." Virasoro agrees: "One cannot renounce principles because there could be reactions or, even worse, because there is pressure."

Balian counters that awarding the medal to Amit would have "created hostility between Lebanese and Israelis, which contradicts the aim of the medal. ... We cannot give this medal to an Israeli without a lot of psychological preparation." And this sad affair has now called into question the future of the prize: The SFP is studying whether to contin-

"I have no shadow of a doubt that they are all acting with con-

> concerns in mind."

-Daniel Amit

structive, ethical

ue its sponsorship of the Rammal Medal.

Such a decision would not sit well with Rammal's family, some of whom live in southern Lebanon. Ali Rammal,

the Lebanese physicist's younger brother-an information technologist who lives in Paris-recently wrote to the SFP's current president, Jean-Paul Hurault, expressing the family's "profound surprise" at the recent turn of events and asking Hurault to "clarify your position concerning the future of the medal." Ali Rammal told Science that although the family has "no opinion either for or against" the choice of Amit, "we want the spirit of the medal to be respected." Moreover, he

adds, "The guardian of the spirit of the medal today is Gérard Toulouse."

As for Amit, he is philosophical about not receiving the prize. "All actors involved are lifelong, dear friends of mine," he told *Science.* "I have no shadow of a doubt that they are all acting with constructive, ethical concerns in mind. Unfortunately, as human beings, we must learn to live with morally unresolvable situations." -MICHAEL BALTER

CELL BIOLOGY

New Clues Found to Diabetes and Obesity

For the 15.7 million Americans with type 2 diabetes, good health means daily vigilance. To head off the eye, kidney, and heart damage the disease can cause, sufferers must follow strict diet and exercise regimes to prevent their blood sugar levels from soaring. Because those measures don't work for everyone, however, some people also need drugs to keep their blood sugars in check. And with nearly 200,000 people dying of diabetes complications each year, better drugs are still sorely needed. On page 1544, a research team based in Canada reports that it has identified a major new target for such a drug—and possibly for anti-obesity drugs as well.

The team, led by molecular biologist Brian Kennedy of the Merck Frosst Center for Therapeutic Research in Pointe Claire-Dorval, Quebec, and biochemist Michel